



Draft for Public Review
Central Waterfront Neighborhood Plan

Prepared with and for the Citizens of the Central Waterfront Area
by the San Francisco Planning Department
As Part of the Better Neighborhoods Program
December 2002

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San Francisco Planning Department

BETTER **2002** NEIGHBORHOODS





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Envision...

that the Central Waterfront has grown to accommodate both new housing and neighborhood commercial services while maintaining its role as an area of important economic activity; it has evolved but its character remains familiar. It is a neighborhood of well-designed, mixed-use buildings that take advantage of transit and a place where new, cutting-edge businesses have appeared next door to more traditional light industrial uses. It is a place better connected to the rest of the city, with an improved public realm, welcoming streets, and where historic structures have been preserved, providing glimpses into the area's past. It is a place that has grown and carefully maintained an unusual mix of uses; it is a neighborhood that has achieved a balance in the process of becoming a better place.

This is the vision that has emerged from two years of community planning in the Central Waterfront. During the last few years, as the city has been besieged by the ups and downs of economic cycles, the neighborhood has found itself the site of ill-considered development. But it will also soon benefit from a major transit investment in the form of the Third Street Light Rail. The neighborhood has become the site of struggle over competing needs—to preserve space for production, distribution, and repair business and to provide much-needed housing—placing it at a defining moment in its evolution. What to do about the Central Waterfront involves more than a discussion of the neighborhood itself, it leads to questions about its larger role in the city, and more specifically, about the role of industrial activity in San Francisco.

The Central Waterfront Neighborhood Plan provides a blueprint for ensuring that new growth is coordinated in a way that creates a robust urban neighborhood and supports the area's role in the city as a whole. Because of their interest and concern, the residents of the neighborhood are, through this plan, setting the Central Waterfront on the path to a better future.



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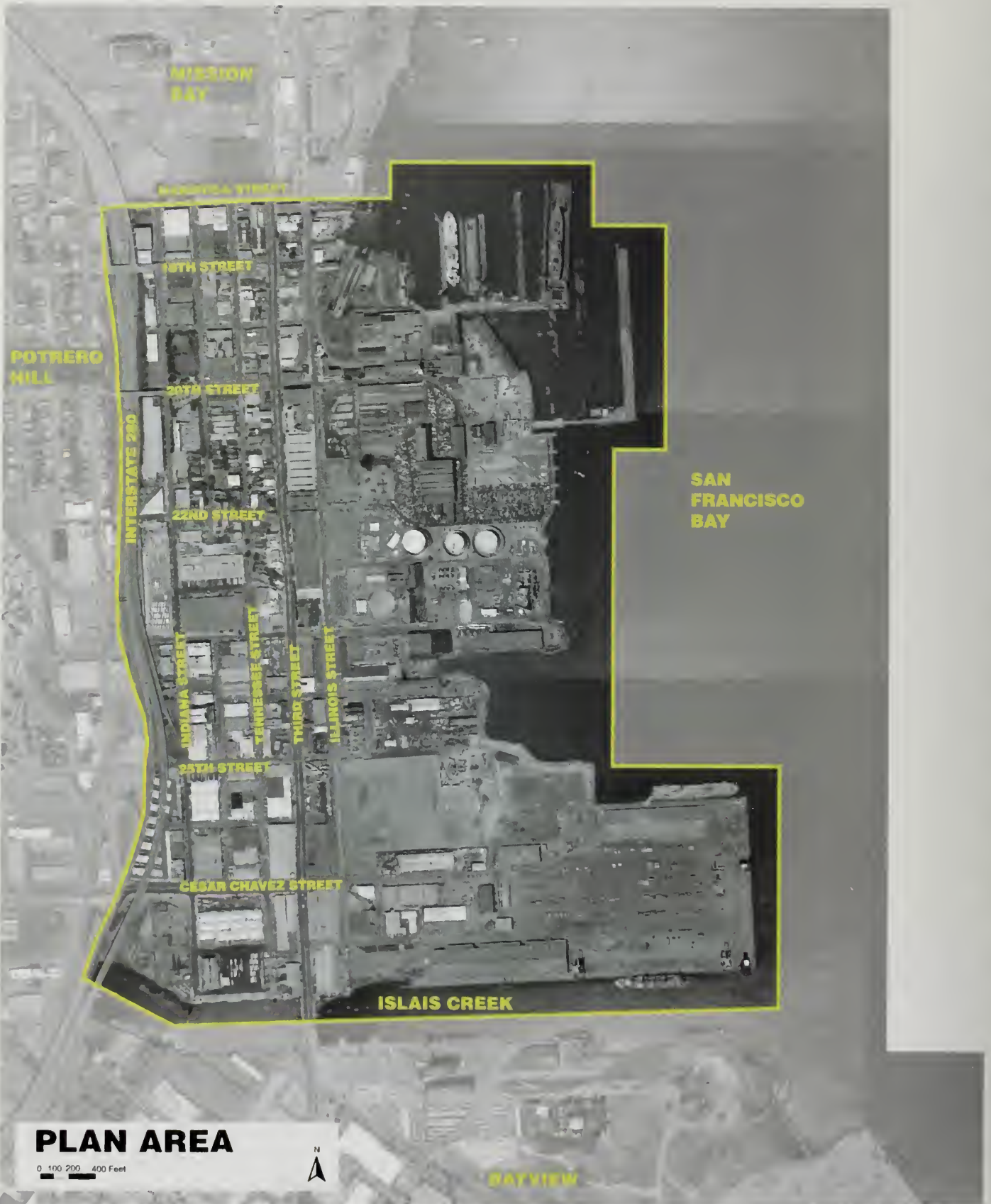


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I Introduction

The Better Neighborhoods Program | Why Plan a Better Neighborhood Here | How to Use This Plan



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This section of the plan opens with background information on the Better Neighborhoods Program, including the reasons that the Central Waterfront was selected to be part of the program, and a description of how the plan is organized and who it is for. The section closes with the six goals that are at the heart of the plan. Achieving these goals is essential to fulfilling the vision for the neighborhood's future.

The Eight Elements of a Good Neighborhood

Part of the dialogue with the community was about the elements that contribute to a good urban neighborhood. The following were thought to comprise the eight elements of a good neighborhood.

Walk to Shops

A great neighborhood has stores and shops that satisfy everyday needs within an easy walk from home. Everyday shops and services include corner groceries, day care, cafes and restaurants, banks, dry cleaners, bakeries, and the like. An easy walk is about five to ten minutes.



Safe Streets

A great neighborhood has safe and friendly streets. In a great neighborhood people can walk without fear of crime, being threatened by traffic, or being disturbed by excessive noise. People feel like they “belong” on neighborhood streets. Residential streets feel public, and more like open space than trafficways. Streets are a pleasant part of the neighborhood.



Getting Around Easily

A great neighborhood has many choices for moving to, from, and within it. Great neighborhoods find it easy to move about on foot, by bicycle, transit, and auto. They accommodate the car, but allow people to live easily without one.



Housing Choices

A great neighborhood has a variety of housing types. A mix of houses, flats, and apartments of various sizes meet different needs and preferences.



Gathering Places

A great neighborhood has places for people to meet, talk, and be neighborly. Public gathering places include parks, plazas, sidewalks, and shops.



City Services

A great neighborhood has a full range of public services for residents. Public services include parks, schools, police and fire stations, libraries, and other amenities.



Special Character

A great neighborhood has its own special character. All neighborhoods are shaped by their physical setting, streets, buildings, open spaces, history, culture and the people who live in them. In great neighborhoods these attributes combine in unique and memorable ways.



Part of the Whole

Great neighborhoods make great cities. Great neighborhoods stand out on their own, yet are connected to the city. They can be a refuge for their residents, but also a part of the city's wider community.



The Better Neighborhoods Program

The development boom of the late 1990s found San Franciscans at odds. Where some would push for development anywhere at any cost, others opposed it just as stridently. The city was nearly paralyzed, and seemed unable to make rational choices regarding change. In response, the Planning Department conducted a citywide land use survey, proposed interim controls on industrially zoned lands, and initiated the Citywide Action Plan, a rational framework for balancing job growth, housing needs, and quality of life.

The Better Neighborhoods Program is one pillar of the Citywide Action Plan. It has carried the discussion of change to three pilot neighborhoods, where development issues are perhaps felt most acutely but where it makes most sense to find acceptable ways to build much-needed housing. Discussions with these communities uncovered profound issues that need to be addressed if the city is to continue to thrive.

San Francisco has a heritage of building well. A look around at the beauty of this place and the way it is revered by residents and visitors alike shows this. But the evidence around us also suggests that we may have lost some of our will to build good neighborhoods respectful of place. We are paying the price. San Franciscans have become concerned, and their concerns seem justified.

There are many factors that may contribute to a degradation of our public realm. National financial markets may impose inappropriate “suburban” development models on cities, development projects may seek to express private values at the expense of public place-making (although these projects derive much of their value from the qualities of the place), construction economies and methods may work against San Francisco’s fine-grained scale and rhythm, street fronts—always places primarily for pedestrians—may be given over to parking or blank walls, planning controls may be at odds with good place-making, unnecessary oversight may be imposed on projects that ought to be allowed as of right, and materials and details may be inappropriate to good city building.



Working through issues at a community workshop.



Bus and walking tours were important parts of initiating the planning process and dialogue.

Also, the public realm has suffered over time as a result of the accommodation of autos over other ways of moving about, and this accommodation has not been successful even for those who drive. It has degraded our streets as places for pedestrians, as well as a system for moving about by foot, bike, transit, and auto.

Many San Franciscans know that something is wrong with our current development practices, and even the most civic-minded have begun to respond to change by opposing it. If they do not try to stop a project, people demand changes that sometimes seem to be more about unfocused frustration than about creating good new development that could benefit a neighborhood. They have little evidence that change can improve their neighborhood and help create and maintain if not strengthen its sense of place. It has become clear through our community discussions that we need to resolve to build well if we are to retain our role as a vibrant, world-class city, and if we are to accommodate change gracefully. And having made such resolve, we need to give the development community the certainty it needs to take on the risks of building well. Meeting these challenges head on is the goal of the Better Neighborhoods Program.

The Better Neighborhoods Program is a tool kit for building well and with a sense of place. It calls for a few simple things that, together, are the keys to good San Francisco place-making. Recognizing that population growth is both inevitable and beneficial, it calls for building housing—as much as possible at an appropriate scale and as affordably as possible—in neighborhoods well-served by transit and other urban services and amenities. It calls for strong neighborhood commercial cores that allow people to satisfy their daily needs by walking and bicycling and without the need to rely on an auto. It calls for gracious streets and public spaces that serve everyone well and that are the life-blood of neighborhood life. And it asks that we design and build well and with care, at a human scale and with respect for the public realm. We know how to do all this. We need only to want to begin.

This public review draft describes the ways to achieve these goals in the Central Waterfront. This is not the end of the community dialogue. The plan is now being brought back to the neighborhood for specific consideration, review, comment, and discussion, in the hopes of crafting a coherent set of rules that will offer the best possible solutions among many differing interests, with a certainty that will assure the communities that invite the change as well as those who will take the development risks to bring it about.

Why Plan a Better Neighborhood Here

- **The city is in a housing crisis.** Every neighborhood needs to determine what its share of housing development should be. The Central Waterfront was one of the first places to be identified as having the capacity to accommodate a significant amount of new housing. This has been due mostly to the perception that the Central Waterfront contains a large amount of underused land and is home to businesses that do not need to be in San Francisco to serve the city. However, the fact is that the Central Waterfront is home to many important, vibrant businesses and thousands of jobs. It is crucial to determine what the Central Waterfront's role in the city should be—a new residential neighborhood, a place dedicated to economic activity, or a mixture of the two.
- **The Central Waterfront is an area that has seen too much inappropriate development.** Recently, the Central Waterfront has been the focus of development generated by the recent economic boom cycle, much of it in the form of live/work units. Live/work development was not sufficiently dense, served only a small niche of the population, and in its design did not enrich the public realm nor contribute to the vibrancy of streets. Furthermore, the influx of live/work units has brought new residents into areas traditionally the home of production, distribution, and repair activities. Both construction of the units themselves and the new residents have forced many once-thriving businesses out of the neighborhood, and sometimes out of the city entirely. Before the recent economic downturn, the demand for office space also pressured these businesses to relocate. It is critical to plan now, in anticipation of the next economic upswing, to ensure that future development is the right kind in the right place.
- **Muni's Third Street Light Rail will soon serve the neighborhood.** This significant investment in transit makes the neighborhood an alluring place for residential development. While it is important to focus development around transit nodes, the case for encouraging mixed-use development, in particular housing or offices, along the entire length of a transit line in the Central Waterfront is not open and shut. Because new development would likely out-compete existing PDR

businesses for space, determining what kind of development is appropriate, how much, and where, is critical. This issue is best addressed through a community planning process.

- **Despite its definite flavor and history, the Central Waterfront does not have a strong neighborhood “heart.”** The Central Waterfront has a very particular, if not unique, mixed-use character with which its residents and workers closely identify. However, there are few neighborhood services and amenities to meet the needs of residents or workers. Centers of activity and places of interest are scattered and not well linked, and connections to adjacent areas, especially Potrero Hill and the new Mission Bay development, need to be strengthened.
- **Existing planning policy and its implementation through the Planning Code do not present a clear or appropriate future for the neighborhood.** The neighborhood needs to prepare for changes beyond just the Third Street Light Rail. Development at Mission Bay, immediately to the north, is underway and will have an effect on the Central Waterfront. The Port is also hoping to develop its Pier 70 Mixed Use Opportunity Site; any new uses at that site need to be well integrated into the neighborhood. Furthermore, community members have shown a will for positive change, and presented a vision for the neighborhood in 1999. All of these things, in addition to points raised above, represent challenges not sufficiently addressed in current policy.

How to Use the Plan

This plan will be an implementing document of the city's *General Plan*. As such, it is a policy framework that will be the basis of new zoning and planning code controls for the area, as well as urban design guidelines, housing policies, and an implementation program for public improvements by various public agencies. This is a public review draft of the plan. Once reviewed and refined through discussions with the community, the Planning Commission will be asked to adopt the plan and the Board of Supervisors to approve it. Specific proposals for rezoning, planning code changes, and the public improvements will follow the plan's adoption.

The Planning Department, Planning Commission, and Board of Supervisors will use it as the basis for re-zoning or other governing regulatory actions within the plan area, to evaluate development proposals, to work with architects and developers to achieve goals stated in the plan, and to coordinate the actions and plans of institutions and agencies such that they progress toward the vision of this plan. The Planning Department will use this plan to make recommendations to the Planning Commission as to whether to approve or disapprove development proposals based on their consistency with this plan.

This plan will provide a guide for other *city departments, agencies, and commissions* in their decisions affecting the plan area. For example, the Department of Public Works, which oversees the city's streets and sidewalks, will use the plan to evaluate requests for the expansion of sidewalks; Muni will use the plan to guide transit investments; and the Department of Recreation and Parks will tailor plans for new open space and community facilities to the plan.

This plan will inform *developers, architects, and engineers* of issues of concern to the neighborhood, quantitative and qualitative guidelines that must be followed in development, goals to be achieved, and policies and standards by which their work and proposals will be reviewed.

Above all, this plan is a tool for *the neighborhood and community at large*. Hopefully, this plan will provide a vision for development around which local residents, businesses, the development community, and the city at-large can rally. It will further provide general education and awareness about the future development in the area so that residents can know what to expect as the area develops, and developers and others can know what and how to build. This plan provides the basis for the community to assess how the ideas and actions of institutions, developers, and city and state agencies are consistent with the plan's vision, as well as a legal basis to hold these players to it.

II Background

History and Context | Current Issues | Plan Goals



This section of the plan provides an overview of the Central Waterfront, including recent trends that have affected the neighborhood and the questions they raise, the area's historical development, its character today, and the issues that will define its future.

The Central Waterfront neighborhood comprises approximately 500 acres along San Francisco's eastern shoreline between Potrero Hill and San Francisco Bay. It is bounded by Mariposa Street on the north, Interstate 280 on the west, Islais Creek on the south, and the Bay on the east.

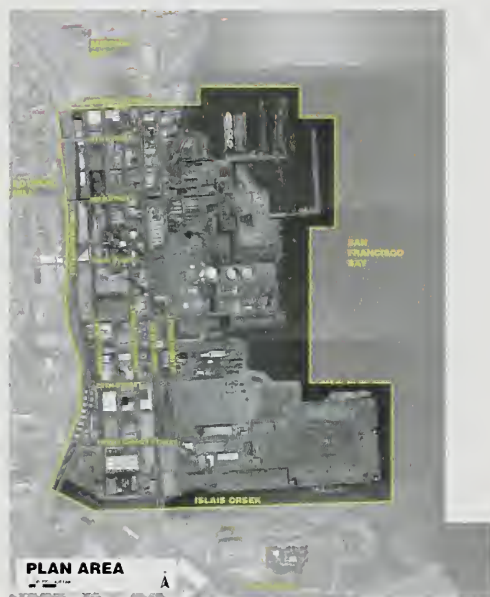
History and Context

Whether dramatically or subtly, cities and the neighborhoods that define them change constantly. In San Francisco, much recent change has resulted from competition over the city's limited land area. In particular, recent economic growth generated largely by the "dot-com" explosion fueled a surge in demand for housing and office space, creating intense pressure in the city's eastern neighborhoods, including the Central Waterfront, to accommodate new development. This development has been primarily in the form of live/work units and offices and has in many instances displaced people and businesses, and changed the character of the places most affected. While the recent dot-com implosion has resulted in very high office vacancy rates, and has all but eliminated the pressure to build new office space, the city's need for housing is still critical and there remains a crisis of affordability.

The Central Waterfront is an appealing place for housing development because it will soon be served by Muni's Third Street Light Rail line, which will run through the heart of the neighborhood. However, the Central Waterfront is currently home to many production, distribution, and repair firms (PDR), the traditional users of industrial land. PDR is a modest but important part of the city's economy and therefore space for this collection of activities to thrive needs to be provided.

These competing needs—to preserve existing PDR uses and to provide much needed housing—have placed the Central Waterfront at a defining moment in its evolution, one at which several future trajectories are feasible. Should it remain an industrial area or become home to a different type of job? Is the Central Waterfront's traditional role as an employment center appropriate for the future, or should it become a residential neighborhood? What are the challenges to building housing in the area? To what extent can employment co-exist with housing? Thus the goal of this plan is to establish policy that strikes a balance between these two needs, and to create a vision for the future of the neighborhood.

The issues facing the Central Waterfront are complex and there are no clear or easy answers to these questions. All choices involve trade-offs and it is impossible to completely satisfy all goals. The role of planning and policy is to balance conflicting goals and manage trade-offs, grappling both with what is most appropriate for the neighborhood and with how the Central Waterfront can best fill its larger role in the city.



These would be difficult issues even if the Central Waterfront were a blank slate upon which residents, planners, politicians, and others could give free rein to their imaginations. That is not the case, though. Rather, the Central Waterfront is a place with a rich history, a complex mix of uses, an established character, and significant features that are fixed for the foreseeable future. Since the 1850s the Central Waterfront has played an important and dynamic role within the city's economy. It has also long been the location of a small residential enclave, known as Dogatch, which was established originally to house workers. Over the course of its evolution, the neighborhood has changed in response to transportation investments, shifting economic conditions, and other factors. Its possibilities are bounded by these limitations and shaped by these assets. Although the nature of a place should not be determined by history alone, and still less by nostalgia, the legacy of its past shapes the context for making key decisions about the future. This plan strives to present a vision of a neighborhood that is conscious of its past while looking forward to a new future, a neighborhood that exists as a unique and vibrant entity while also continuing to play an important role in the city as a whole.

The Central Waterfront in History

The Not-So-Natural History

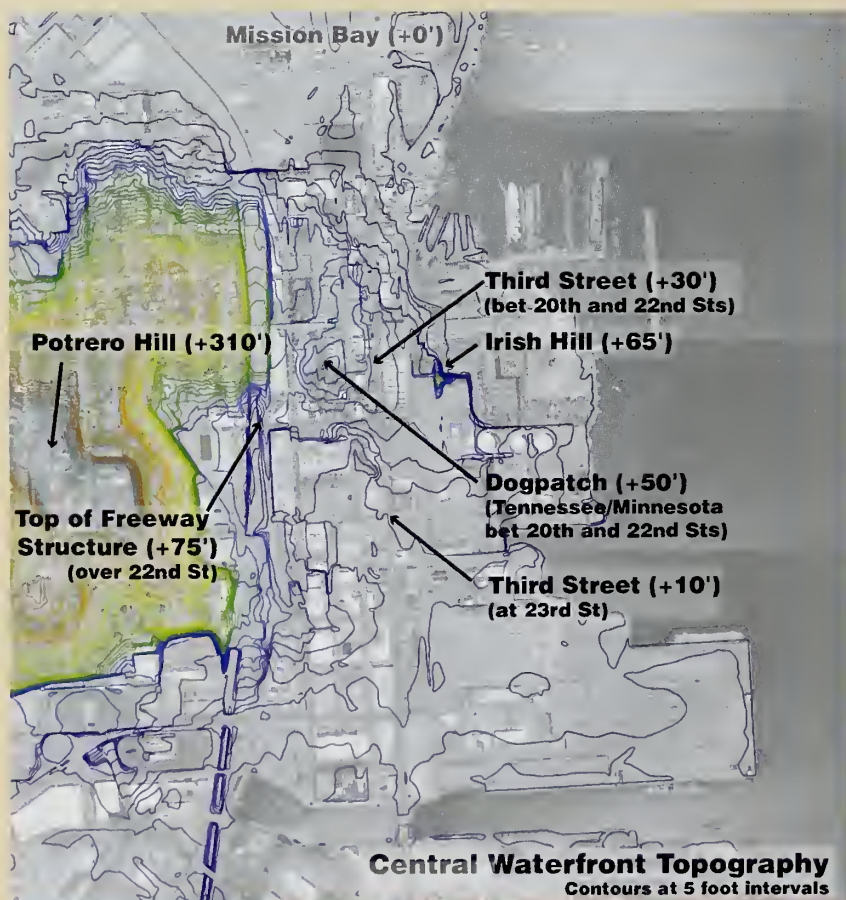
The Central Waterfront today is a man-made landscape whose natural appearance has been completely transformed. The creeks, marshes, waters, and hills that dominated the area in 1850 have vanished in favor of flat lands and fill. This early transformation was accompanied by the development of industrial, maritime, and residential uses.

The waterfront north of 16th Street was once home to Mission Bay and Mission Creek. Once the home to industry and railroads, it is now home to the new Mission Bay development. The waters of Mission Bay covered approximately 260 acres and, though shallow, were navigable by draft vessels. Mission Creek drained the eastern slopes of Twin Peaks and adjacent areas. Salt marshes fringed Mission Bay and Mission Creek, occupying an additional 330 acres and extending inland westward of Potrero Hill to what is now 20th and Harrison Streets.

Beginning in the 1850s, the marshes were filled by individual owners and as part of the construction of toll roads that bridged Mission Bay. Southern Pacific Railroad acquired the bulk of the Mission Bay property in 1868 and 1869 from the state and from private landowners, and gradually filled the bay during the later 19th and the early 20th centuries.

Originally, the Central Waterfront was a rocky peninsula extending from Potrero Hill approximately between 20th and 22nd Streets. The peninsula rose to an altitude of 100 feet or more above the Bay. Leveling and filling has occurred to such an extent over the years that almost no vestige of its former shape remains, save for the small portion of Irish Hill on Michigan Street that remains today.

The section of the Central Waterfront from 25th Street south to Islais Creek was developed most recently. Islais Creek originally drained the area from Twin Peaks and Glen Park to Alemany Gap. It still flows into San Francisco Bay, although its course today runs through a concrete aqueduct terminating beneath Interstate 280.



The varied topography and original shoreline that characterized the Central Waterfront at the start of the Gold Rush are no longer visible. One hundred and fifty years ago much of the area—then referred to as Potrero Point or the Potrero—consisted of marshy tidelands, creeks, and estuaries at the base of the Potrero Hill pasturelands. Much of the Bay north and south of Islais Creek was filled to accommodate industry. A remnant of the past is found in what is left of Irish Hill, most of which was used as fill.

Islais Creek and the marshes surrounding it were a barrier to the southern development of San Francisco. Organized efforts for reclamation were unsuccessful until 1925, when the state passed legislation that enabled the creation of the Islais Creek Reclamation District. The district successfully filled the marshes and tidelands, and dredged Islais Creek to include a turning basin at its western end to allow for ship maneuvering.

Industrial development to the north of Islais Creek was generally delayed until after World War II. During the war the area was the site of temporary housing. This housing was demolished after the war and much of the area was subsequently developed as an industrial park with single-story concrete buildings; food and oil processing plants were developed south of Army Street (now Cesar Chavez Street).

The most recent filling of Islais Creek occurred during the construction of Pier 80, formerly the Army Street Ship Terminal. Financed by a state bond approved in 1958, the terminal went into operation in 1967.

Now, however, development involving the Bay is closely regulated. In response to concerns that the health of the Bay itself was being threatened, the San Francisco Bay Conservation and Development Commission (BCDC) was established by the 1965 McAteer-Petris Act. BCDC has curtailed Bay fill by regulating activities within its jurisdiction, which includes a part of the shoreline.

Evolving Land Uses

While there has almost always been a small residential population here, from the middle of the 19th century the Central Waterfront has been primarily a job center, not a residential neighborhood. However, even in its role as a place of work, the neighborhood has changed in response to shifts in economic conditions. From explosives manufacturing and shipbuilding to auto-oriented warehouse and distribution activities and the current eclectic mix of businesses, the Central Waterfront has reinvented itself in response to economic trends and the changing fortunes of several key industries. Throughout its history, perhaps the neighborhood's most salient features have been its evolving industrial character and its flexibility and resilience.



1892 view of the eastern portion of the city near Potrero Hill, published by Baldwin & Lammond. (Lipsky, Florence, *San Francisco: The Land Meets the Hills*: Editions Parentheses, Marseille, France, 1999)

Far from the center of the still-small city of San Francisco, and with access rendered difficult by the hills to the west and Mission Bay to the north, the area was remote and undeveloped. In fact, the first development sought to take advantage of Potrero Point's remote location. Increasing population and a city ordinance promulgated in the 1850s to prevent the most dangerous industries from locating near settled areas forced certain industrial activities out of South of Market. Isolated Potrero Point, with its deep-water anchorage, was the ideal location, and by the late 1850s several gunpowder manufacturers had built factories and wharves there. Several other industries followed the gunpowder manufacturers, notably the San Francisco Cordage Manufactory (Tubbs Cordage Works), which sold ropes for shipping and mining in the Western United States, Mexico, Peru, China, and Japan. Shipbuilders, attracted by the availability of large parcels of land and a deep-water port, also began to set up operations in the area. Tubbs Cordage Works was established in 1856 on a leveled site now occupied by Muni's Woods Yard. Included in the project was a 1500-foot ropewalk that extended into the Bay and probably served a secondary purpose as a loading wharf.

Throughout the 1860s, 1870s, and 1880s the area continued to grow into an important industrial district. William Alvord received a grant of submerged property that he filled in order to construct Pacific Rolling Mills in 1867. Pier 70 is now on this site. As fill increased, other industries located in the Potrero Point area. The San Francisco Gas Light Company began operations in 1872 and parts of it exist today in the present power plant. Other factories set up in this area included the California Poppy Soap Company, California Sugar Refinery, later Sea Island Sugar House, and the American Barrel Company.

The most important event in the industrial history of the area was the establishment of the Union Iron Works (UIW) shipyard at the site of what is now Pier 70 in 1883. UIW soon grew into one of San Francisco's largest industrial establishments and became a key part of the city's economy. Most of Potrero Point was leveled in conjunction with the construction of the iron works. Though originally known for machinery production, Union Iron Works was also active in the shipbuilding field. Its acquisition in 1905 by Bethlehem Steel led to an expansion of the company's shipbuilding efforts. Ship production peaked during World War I and World War II and was augmented with repair and maintenance work during other times.

For decades it remained the largest employer in the area and had an enormous and lasting impact on the area. Bethlehem Steel and the other Central Waterfront industries were closely linked to the global economy: they exported mining equipment throughout the Pacific Basin and their ships traveled the world.

Despite the area's predominantly industrial character, some housing was built. Beginning as early as the late 1860s, Irish Hill became home to a concentration of worker housing, which was eventually demolished during World War I to make room for expansion of the shipyard. In the late 1870s another residential area began to arise in Dogpatch. Whereas most inhabitants of Irish Hill were unskilled and semi-skilled Irish male laborers, Dogpatch was originally home to mainly native-born skilled craftsmen, some of whom applied their skills to building their homes. With few exceptions, most residences in the Central Waterfront were demolished over the decades. The remaining homes can be found along Tennessee Street between 18th and 22nd Streets.



Cranes at Pier 70.

From the beginning, then, the Central Waterfront was marked by its industrial character. Despite the construction of some housing in Dogpatch, the area was always more important as an employment center than as a residential neighborhood. Even at its peak, it was never home to more than 1,200 people, whereas the local industries employed at least ten times that number during World War I.

In its role as an employment center, the Central Waterfront has demonstrated significant flexibility and resilience, “reinventing” itself several times over the course of its life. The heavy industry—primarily shipbuilding—that dominated until the end of World War II eventually gave way to a mixture of other manufacturing establishments, such as the American Can Company, and wholesale, warehousing, and distribution operations. These latter businesses grew in response to shipping activity and freeway connections to downtown and the rest of the region. This mixture of activities led to a more fine-grained pattern of buildings and users. With the loss of wartime shipbuilding activity and the other factors that caused manufacturing to move out of the city, the Central Waterfront became more specialized in distribution, primarily small-scale local distribution.

Later, in the 1980s and 1990s, the neighborhood began to attract an eclectic mix of small manufacturing firms, graphic designers, film production studios, and other activities that had either been priced out of other parts of the city or simply found the neighborhood and its buildings well suited to their purposes. Many former manufacturing buildings—notably the American Can Company buildings—became home to a wide range of small firms and played an important role as incubator space for new businesses.

In more recent years, production activities have made a comeback in the area. This appears to be due not only to the neighborhood’s continued suitability for those activities but also to the displacement of certain production activities from South of Market and the changing nature of production. For example, some printing firms have moved to the Central Waterfront in search of lower rents while the printing industry as a whole has grown in San Francisco, which is likely related to the new style of production in printing. So, in many ways, the evolution of the Central Waterfront reflects changes in production and distribution, especially as they were affected by economic cycles and advancements in technology, that the city in general has experienced.



The Coming of Third Street Light Rail

During the first half of the twentieth century, streetcars traveled up and down Third Street, shuttling riders between downtown and points along the Bayshore Corridor. As the primary mode of transportation into and out of this area, this streetcar line helped spur development of today's Bayshore communities. After years of planning, the Third Street Light Rail Project will soon reestablish rail service along this corridor.

In 1989, San Francisco voters passed Proposition B, a half-cent sales tax to support transportation improvements in the city, including "fixed guideway" improvements in the Bayshore Corridor. In 1994, the city selected light rail on Third Street as the preferred mode and alignment for such improved service. After a lengthy public process and more-detailed engineering and design, the environmental impact statement was approved in late 1998, and funding hurdles cleared in 1999 and 2000. Construction began in 2002, and service will begin in 2005.

The new light rail line will be built in two phases:

Phase One will extend Muni Metro light rail service 5.4 miles south from its current terminal at Fourth and King Streets. The line will cross the Fourth Street Bridge and run along Third Street through Mission Bay, the Central Waterfront, and Bayview/Hunters Point, then along Bayshore Boulevard to the Bayshore Caltrain Station in Visitacion Valley. Trains will run primarily in the center of the street in a dedicated right-of-way. Through the Bayview commercial core, however, they will mix with cars. In the Central Waterfront, trains will stop at Mariposa, 20th, 23rd, and Marin Streets. A turnaround loop and train layover on Illinois Street between 18th and 19th Streets will enable Muni to run additional, shorter-run service to Mission Bay and the Central Waterfront when Mission Bay can create enough ridership to support it, probably sometime in 2008 or 2010. A new Metro East Operating and Maintenance Facility being built on 13 acres at 25th and Illinois Streets will allow Muni to store, maintain, and dispatch light rail vehicles. That facility is expected to open for service in 2005.

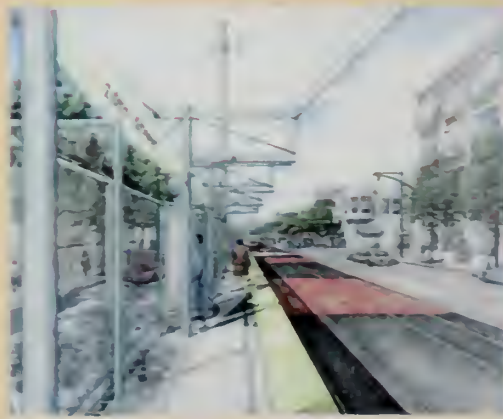
Phase Two will extend the light rail north from King Street along Third Street, entering a new Central Subway near Bryant Street, crossing beneath Market Street and heading into Chinatown. Muni and the city are actively pursuing funding for Phase Two.

The goals of the project are to:

- Improve service reliability and travel times (travel time from the Central Waterfront to the Financial District will improve by five minutes with Phase 1 and by seven to ten minutes with Phase 2).
- Enhance connections to Caltrain, BART, other Muni lines, and other regional transit.
- Help generate economic opportunities and jobs for local residents and business owners.

Through public workshops, the community and the city selected a theme, *Great Street / Main Street*, which describes the special expressions of place along the corridor. The *Great Street* concept emphasizes the unity of the corridor, primarily through consistent and recognizable elements corridor-wide. The *Main Street* concept acknowledges the corridor's role as a "main street" for the communities through which it passes—Mission Bay, the Central Waterfront, Bayview/Hunters Point, and Visitacion Valley. For each, the project will reflect individual characteristics, a quest for the new, and the strong craftsmanship inherent in all of these places.

In the Bayview commercial core, the project includes streetscape improvements for the entire right-of-way from property line to property line. Outside of this neighborhood, including the Central Waterfront, the project includes only the transit elements—platforms, strain poles, roadway paving, signage, street lighting, and street trees at 20 feet on center. This plan, however, proposes additional improvements to the Third Street corridor in the Central Waterfront, like pedestrian-scale lighting, street furniture, corner bulbouts, special paving, enhanced tree plantings, and corner setbacks to new development where it is appropriate to the goals of the plan.



Artist's renderings of Third Street with light rail. Left: Looking north toward 20th Street stop. Right: Platform view of 20th Street stop, looking north.

Transportation

Transportation connections to rest of the city—and the world—have always been a major factor shaping the area's development. As mentioned above, the deep-water anchorage was one of the traits that originally made Potrero Point suitable for industry. But until 1867 the area remained cut off from the rest of the city. In that year, the Long Bridge was built across Mission Bay, extending Third Street down to the Central Waterfront and ending the area's isolation. Horse-drawn streetcars began to roll down Third Street, followed eventually by electric streetcars. Transportation connections allowed workers to travel from elsewhere, fueling the development of industries that, unlike gunpowder manufacturing, were not drawn to the area's isolation. Transportation also permitted a substantial segregation between industry and housing that was very different from the mixture of uses that characterized South of Market.

The Port was, of course, the largest component of the area's transportation infrastructure for many years, and a significant amount of manufacturing and distribution activities concentrated in the Central Waterfront in order to have access to the Port. Rail spurs connected the area to the nationwide railroad network, and in 1907 the Bayshore Cutoff was completed and the Central Waterfront became the main access to the city for all trains. The post-World War II years witnessed the eventual decline of both freight and passenger rail in San Francisco. But by 1973, the extension of the I-280 freeway through the neighborhood established its appeal to trucking activities, airport shuttles, and other auto-oriented transportation and distribution companies. Transportation continues to play an important role in the area. The coming introduction of Third Street Light Rail and CalTrain improvements will enhance the neighborhood's accessibility and thereby its attractiveness to both housing and business development. The continued presence and expansion of Muni yards represent a different, but ongoing, presence of transportation functions.

The Central Waterfront Today

Today an unusual, sometimes fine-grained, mix of uses is one of the defining characteristics of the Central Waterfront. The wide variety of uses and the mix of building types have helped the Central Waterfront continue to be a diverse and flexible place. There are few, if any, other areas of the city that contain the same variety of activities, and this eclectic mix





Live/work lofts have been the most prominent form of new development in the Central Waterfront in recent years.



Typical large floor-plate PDR building.

is cited by the residents as one of the features of the neighborhood that they value. The northern part of the Central Waterfront, west of Illinois Street, contains the most widely ranging combination of activities in the area; it is where parcels are small and the building types are the most varied. The southern part of the Central Waterfront is characterized by a more regular pattern of large parcels and primarily large, single-story buildings.

While the area has long contained residences, and even though the construction of a number of live/work buildings has altered the character of parts of the neighborhood to some degree, the Central Waterfront is nevertheless still overwhelmingly defined by the production, distribution, and repair (PDR) businesses found in the area's many one- and two-story, mostly large floor-plate structures. San Francisco Drydock and Pier 80, the Port's container terminal, comprise the Port's maritime uses in this part of the waterfront; the Port has identified a portion of Pier 70 as a significant opportunity site for future development.

The most readily identifiable residential area in the Central Waterfront is found on Tennessee and Minnesota Streets, the center of the Dogpatch neighborhood. Many of the houses in this area were built around the turn of the century, if not earlier, and are typically one- to two-story structures. In fact, the neighborhood has a significant concentration of historic buildings, including the I.M. Scott School and the old fire and police stations in Dogpatch itself, as well as a number of structures on Port property associated with the old Union Iron Works and Bethlehem Steel. In coordination with residents, the city is in the process of designating a Dogpatch historic district.

Unlike most typical residential neighborhoods, a number of PDR businesses are intermingled with the residences. This mixing has continued with the more recent housing development, which has come in the form of live/work units scattered throughout the area.

As of the year 2000, the Central Waterfront's population numbered about 850, and it contained about 457 housing units (including live/work), though these figures are actually a little higher as several live/work projects have been completed in the interim. The neighborhood's sparse residential population has limited the number of neighborhood-serving businesses it

can support. A small collection of such shops and services are found at 22nd Street, which serves as the commercial “heart” of Dogpatch. Esprit Park, recently transferred to city ownership, is the neighborhood’s primary open space.

The Central Waterfront Tomorrow

The Central Waterfront maintains strong connections to the larger city and region. As such, it is caught in the current of changes affecting San Francisco. The neighborhood has been the recipient of displaced businesses from South of Market and is a scene of transformation rooted in escalating real estate costs and the new development. Certain characteristics have encouraged these changes, including the presence of flexible industrial space at affordable prices and the availability of relatively inexpensive and, in some cases, underutilized land. Furthermore, because the area is zoned primarily for industrial uses, there are potentially fewer obstacles to development. San Francisco’s industrial zoning categories, M-1 and M-2, are inclusive designations, meaning that they can accommodate nearly any activity. Areas so designated can thus be attractive places in which to pursue other than industrial development. The Mission Bay redevelopment area immediately to the north, which among other things will house a new UCSF campus, and Muni’s new Third Street light rail extension will also make the neighborhood a more attractive place in which to invest. These pressures have made it critically important to decide what future land uses should be allowed in the Central Waterfront.

Port-owned land within the Central Waterfront is also in the midst of a transition away from traditional industries to planned long-term development that may take years. Currently, therefore, Port-owned land has a number of interim uses. The Port’s *Waterfront Land Use Plan* calls for a new approach to generating revenues from limited mixed-use, non-maritime development at Pier 70 in order to restore historic buildings, clean up environmental contamination, and make portions of its shoreline available to the public.

Background to the Port

The Port has been critical to the evolution of the Central Waterfront. In the latter half of the 19th Century, the Port's governing body at the time, the Board of State Harbor Commissioners, surveyed the Bay frontage in the area and delineated what would become Port property. Port property has been used for shipbuilding, manufacturing, and by the second half of the 20th Century, cargo handling. Piers 70 and 80 have been of particular importance. Since the 1880s, Pier 70 has been the site of a variety of industrial activities, from shipbuilding to steel production. Today, Pier 70 is home to San Francisco Drydock, the longest continually operating ship repair business on the West Coast and a major employer in the Central Waterfront. The Port's cargo terminal at Pier 80 was initially developed in the late 1960's, when it was known as the Army Street Terminal. It was subsequently upgraded, providing the Port and city with modern container and non-container cargo-handling facilities.

Although the cargo-shipping industry continues to be very dynamic, the Port has found success in marketing the terminal to niche operators, mostly from Central and South America, carrying container and non-containerized cargo, rather than competing with



the Port of Oakland for business from the large container ship operators from the Far East. Continued, efficient access by freight rail and truck from the peninsula, freeways, and city streets is fundamental to the viability of these maritime industries.

The Central Waterfront's rich history is established not only by these long-time industrial land uses, it also is reflected in the unique, largely intact collection of historic architectural resources found on Port property. However, most of these structures are in various states of disrepair, and many are no longer suited to modern maritime business operations. In addition, the repair cost for most of these buildings far exceed the financial ability of most maritime businesses. Yet, there is a great desire and commitment by the Port and community to preserve and restore as many of these historic resources as possible.

Regulatory Governance

In 1968 the Burton Act, passed by the State Legislature, transferred public lands along the San Francisco Bay waterfront—current and former tidelands that were filled to form the city's edge—from the state to the city. The Port of San Francisco, as trustee, is required under the Burton Act to manage and develop these lands in conformance with "the public trust doctrine," to benefit the citizens of California. The basic principle of the public trust doctrine is that public trust lands are to be used to promote navigation, fisheries, waterborne commerce, natural resource protection, and uses that attract the public to use and appreciate the waterfront, including recreation and assembly. The Port makes determinations as to whether a given lease or development project is consistent with the public trust, as informed by numerous court decisions, a history of State Lands Commission lease approvals, and Attorney General opinions. Pursuant to the Burton Act, all revenue generated from these public trust properties must be dedicated to promoting public trust purposes. The Port Commission has fiduciary responsibility to manage, repair, and improve these lands. Although the Port is structured much like other city departments, it is unique in that it must further state-wide interests, and do so without monies from the city's general fund.

Agencies with regulatory authority over land use on Port property include the San Francisco Bay Conservation and Development Commission (BCDC), the San Francisco Planning Department, and the Board of Supervisors. BCDC exercises regulatory power over any construction within the Bay and the first 100 feet of the shoreline. BCDC restricts uses in Bay fill developments to “water-oriented” activities, and requires “maximum feasible public access” in all projects subject to its permit authority. Port land uses must also meet regulatory requirements and planning objectives administered by the Planning Department, including compliance with zoning, height limits, and other provisions of the San Francisco Planning Code requirements, as well as all applicable requirements of the California Environmental Quality Act. Any appeals of Planning Commission actions on conditional uses or on CEQA certification are reviewed and acted upon by the Board of Supervisors. The Board also reviews and approves Port non-maritime leases for terms of 10 years or more and which generate revenues of \$1 million per year or more.

The Waterfront Land Use Plan

The Port’s land use policies for Port lands are set forth in the Port’s Waterfront Land Use Plan (Waterfront Plan). The Port Commission adopted the Waterfront Plan in 1997; its policies are consistent with the city’s General Plan. The Waterfront Plan includes a Waterfront Design and Access element that focuses on policies and design criteria for expanding waterfront public access and open space, preserving historic resources, and promoting architectural and urban form that is well integrated with and reunites the waterfront with the rest of the city.

With respect to Port properties in the Central Waterfront, the Waterfront Plan reserves most of the Pier 70 area and the entirety of Pier 80 for “Existing Maritime or Maritime Expansion,” recognizing these facilities as the mainstay of the ship-repair and cargo-shipping industries. The maritime expansion designation reflects the Port’s continued commitment to maintaining and enhancing maritime business and industry in San Francisco’s economy. In addition to reserving land, the Port has proposed a major maritime infrastructure project in the Central Water-

front, the Illinois Street Intermodal Bridge, which will cross Islais Creek, provide direct freight rail and vehicle access to Pier 80, serve as an intra-terminal connection linking the Port’s cargo shipping facilities, and help relieve industrial traffic volumes that otherwise would travel on Third Street.

In addition to addressing the Port’s maritime needs, Waterfront Plan policies also recognize opportunities in the Central Waterfront to meet other goals of the plan. Mixed use opportunity areas, which allow for development of revenue-generating, non-maritime uses, are designated for the portion of Pier 70 fronting on Illinois Street between 18th and 20th Streets, and on the former Western Pacific site immediately north of Pier 80. The latter is the site of Muni’s Metro East facility, now under construction. Since the Port receives no city or state funding, revenue from development of Port property is the only source of funds (except for occasional grants that the Port may secure) available to finance maritime improvements, rehabilitate historic resources, and create public access and open space.

In the Pier 70 Opportunity Area, the Port’s main objectives are to restore the Bethlehem Steel Administration Building and Union Iron Works architectural resources, and create major new public access to the shoreline. To accomplish this, it is expected that development of complementary commercial and non-maritime uses will be needed to generate revenues to finance such improvements, as well as to generate the activity levels necessary to creating inviting and safe public access

The long-term development of the Port’s properties will be incremental and it will take many years to realize the objectives of the Waterfront Plan. Therefore, the plan also addresses and allows interim uses, enabling the Port to manage its real estate assets and maintain a stream of revenue to support the Port’s operations. Given that Port lands in the Central Waterfront are zoned and have been used historically for industrial purposes, it is no surprise that most leases for interim uses have been and are for industrial activities. Despite the deteriorated condition of many buildings and facilities, Port lands have provided an important, albeit temporary, resource for maintaining general industrial uses in San Francisco.

Recent changes in the economic cycle have made reinvestment in Central Waterfront buildings and businesses attractive. Since 1990, at least \$32 million has been invested in new or existing PDR structures within the plan area.



The Central Waterfront is home to about 6,200 jobs: 70 percent are PDR jobs; 16 percent are business services, and 6 percent are in retail. The remainder are scattered in various categories. There are about 460 housing units and 850 residents in the plan area.

Current Issues

The Need for Production, Distribution, and Repair (PDR)

Prior to and during the initial stages of the Better Neighborhood Program, it was thought that the Central Waterfront would be an appropriate place to create a dramatically expanded residential neighborhood. However, evaluation carried out as part of the subsequent planning process has led to a better understanding of the area. It is now clear that incautious development of housing would imperil the neighborhood's many vibrant businesses. In order for the Central Waterfront to continue to support the city's economy, the space and building stock that house PDR activities must be retained.

Since the 1850s the Central Waterfront has played an important and dynamic role within the city's economy and land use system, providing critical "flex-space" for new and changing industries, and is one of the last areas of the city still suited for this purpose. The importance of PDR has been established by a series of analyses and policy decisions, including the establishment of Industrial Protection Zones by the Planning Commission and the recent publication by the Planning Department of a report entitled *Industrial Land in San Francisco: Understanding Production, Distribution, and Repair* (included as an appendix to this plan.). PDR is important to the city because: it adds diversity to the economy; is linked strongly to other important sectors, such as office-based downtown businesses and tourism; and the businesses pay good wages, even for jobs that do not have high skill requirements. In fact, employment in the PDR sector grew 13 percent between 1997 and 2001, precisely the period when San Francisco's "post-industrial" or "new economy" sectors were undergoing rapid change and expansion. However, many PDR activities can thrive only if they are some distance from residential development, have access to a specialized building stock, and can find comparatively inexpensive space.

The Central Waterfront plays a vital role for PDR in that it provides all of these qualities. The Central Waterfront contains a significant amount of the city's remaining industrial land, land that PDR has traditionally found desirable. The Central Waterfront also contains important building stock that has the features desirable to PDR—large floor plates, clerestory structures, and loading docks, for instance. Most PDR businesses cannot afford to pay rents of much more than \$1.50 a square foot, and many even less, which is one of the reasons other sectors can out-compete them for space. Existing building stock is thus doubly important because it is affordable—new construction, even of PDR space, is too expensive for all but a few of the highest-end PDR businesses.



The Need For Housing

While it is important for San Francisco that PDR be retained and encouraged in the Central Waterfront and the city, it is also important to determine where new housing can be best accommodated. San Francisco needs to build new housing and the Central Waterfront provides opportunities to do so in a place that will be well-served by transit. While there are no large unencumbered sites that would allow construction of major housing developments in the immediate future, there are a number of infill opportunities as well as places where future housing development may be appropriate; as much as possible, these opportunities must be taken advantage of. Bringing housing to the Central Waterfront is also critical to supporting a much-needed increase in neighborhood commercial services, to enlivening open spaces, and to creating a vibrant and cohesive residential neighborhood.

Development of extensive housing is also limited by a number of significant, fixed uses that take up a large portion of the Central Waterfront's land area. They include:

- The Potrero power plant. Prior to this plan, it was thought that the Central Waterfront could accommodate thousands of housing units. This was based in part on the perception that the power plant was to be shut down, making a large tract of land available for other uses. However, the California Public Utilities Commission is now considering an application to expand the plant's power generation capacity. Even should this application be denied, there are no indications that the existing power plant will be taken off line in the foreseeable future.
- Muni operations. The Muni Woods facility is a large bus maintenance and storage operation at 22nd Street and Indiana Street; it has recently received multi-million dollar improvements. Metro East, the maintenance and storage yard that will support the Third Street Light Rail, is under construction at Illinois and 25th Streets. Muni is also designing a new facility at Islais Creek between I-280 and Indiana Street. Not only do these facilities take up a significant amount of land, but they are not the best neighbors to housing.
- Port activities. Port land in the Central Waterfront is home to ship repair activities at Pier 70 and to an active terminal at Pier 80. Both will continue to operate well into the future. Nevertheless, here as elsewhere on Port property, housing is prohibited by the doctrine of Public Trust.

- The I-280 Freeway. The freeway is an imposing, unpleasant, and environmentally poor neighbor to housing. When there is a choice, lands immediately adjacent to the freeway are better used for PDR activities, which would also serve as a buffer between it and the rest of the neighborhood.

Because the amount of land available for housing in the foreseeable future is constrained, it is especially important to make the most of existing opportunities. This means determining heights and densities that allow for the most efficient use of land possible. By incorporating strong design standards it will be possible to build in ways that enhance the neighborhood and respect its existing character.



Plan Goals

These plan goals are based on discussions with the community and are refinements of ideas presented to the neighborhood throughout the planning process. They pull together the main themes of the objectives and policies that form the body of this plan. These objectives and policies are all found in the Plan Elements Section and are organized by subject matter: Land Use, the System of Parks and Open Space, Historic Preservation, Moving About, and Urban Design. Each goal represents a cross-section of ideas that draws from these topics. Working towards these essential plan goals will make solid the vision of the Central Waterfront of the future.



Light industry interspersed with housing is one of the Central Waterfront's defining characteristics.

Goal 1

Encourage development that builds on the Central Waterfront's established character as a mixed use, working neighborhood.

One of the most important features of the Central Waterfront is its unusual mixture of activities. A place for both living and working, the neighborhood has over the years maintained a balance between activities that are often thought to be incompatible. Recent development, especially live/work construction, has disrupted the arrangement of land uses in the Central Waterfront and pressures to develop the area could further diminish its unusual qualities. Therefore, it is critically important that new development respect the existing character of the neighborhood by reflecting its pattern and forms while at the same time contributing to its evolution.

Goal 2

Foster the Central Waterfront's role in the city's economy by supporting existing and future production, distribution, repair, and maritime activities.

The Central Waterfront has long played an important role in the city's economy as a place for a myriad of businesses that traditionally do not locate in the downtown but that maintain strong connections to it and the rest of the city, especially the city's wider business community. The city classifies these businesses as production, distribution, and repair (PDR), a category that encompasses a wide array of activities that share certain characteristics: they are rent-sensitive, they generally require large-floor-plate, flexible building types, and many are not comfortably located in residential neighborhoods.





The Central Waterfront is also important to the city's economic future, as it is one of the few places remaining where incubator firms can locate. With a place for such businesses to thrive, the city helps to ensure itself as an economic innovator, and is in turn poised to take advantage of future trends in the economy.

It is also here that the Port has two major maritime activities: ship repair at Pier 70 and cargo operations at the Pier 80 terminal. These activities, as well as any maritime uses that may be developed in the future, need to be supported because they contribute substantially to the city's economy, both in terms of jobs and by helping to maintain economic diversity. As the neighborhood changes, it should do so in ways that are not disruptive to maritime activities.

San Francisco's economic base, its culture, and its social diversity all take something from the Central Waterfront in its role as a home to PDR and maritime uses; undoubtedly, the Central Waterfront is an important part of the city as a whole.



Goal 3

Increase housing in the Central Waterfront without impinging on or creating conflicts with identified existing or planned areas of production, distribution, and repair activities.

The Central Waterfront needs more housing, both to help address the city's overall need and as the basis for creating a more vibrant neighborhood. In order to develop housing in ways that will not disrupt existing economic activities, new housing should be encouraged near already existing housing enclaves as much as possible. PDR uses that have significant negative externalities, such as late-night deliveries or the intensive use of toxic substances, should not be allowed to mix with housing. This reduces conflicts between residents and businesses that most often result in the forced relocation or closing of the business and makes for a more pleasant environment for areas that are or will become residential.

Goal 4

Establish a land use pattern that supports and encourages transit use, walking, and biking.

In a densely built city such as San Francisco, all modes of travel must be supported. It is inefficient to give priority to automobiles. The best way to support alternative means of travel is to ensure that development is sufficiently dense, well designed, and incorporates a mix of uses. These characteristics

enable people to satisfy daily needs by walking to services and shops, and they make moving about the city safe, comfortable, environmentally friendly, and, because there is a limited amount of roadway in the city, efficient.

The Central Waterfront faces challenges and opportunities. One major challenge is Mission Bay. When it is built out, activity generated by development there will use up the Central Waterfront's street capacity. Other modes of travel must be supported if people are to continue to be able to move around efficiently. On the other hand, the Third Street Light Rail will be serving the neighborhood. To take advantage of this new transit investment, new mixed use development must be focused around or near rail stops. Furthermore, to make the most of limited land area and to generate enough development to support an enlivened place, heights and densities must be increased as much as possible without destroying the character of the neighborhood. Land use must be supported with good design in order to achieve this goal in a way that will improve the neighborhood.

Goal 5

Better integrate the Central Waterfront with the surrounding neighborhoods and improve its connections to Port land and the water's edge.

The Central Waterfront is not well connected to surrounding neighborhoods, especially Potrero Hill, with which it is most closely associated. The bridges across I-280 are unfriendly to pedestrians, Muni connections are limited, and 18th and 20th Streets, which connect the two neighborhoods, are not designed to encourage walking. Immediately to the north, construction of Mission Bay is under way. This will bring intensive new development and all of its attendant pressures to the doorstep of the neighborhood. How the Central Waterfront greets Mission Bay will have significant implications for the neighborhood.

Port land, which lies east of Illinois Street, is not well integrated with the rest of the Central Waterfront. It is hard to get to the water's edge and there are few destinations. Where there is public access to the water, there is not enough activity to make it feel attractive or safe. While improved access to the Bay is important for pleasure-seekers, businesses associated with the Port's maritime activities would benefit from improved access to and circulation within Port land.

Development of the Port's Pier 70 Opportunity Site will present a significant opportunity to weave the Central Waterfront and Port land together. Connections from the neighborhood into Pier 70 should be emphasized, particularly by designs that bring people to open space at the water's edge. Whatever development occurs should present a welcoming face to the adjacent neighborhood and should encourage its users to take transit.

Goal 6

Improve the public realm so that it better supports new development and the residential and working population of the neighborhood.

The public realm is the part of the built environment with which people come into contact physically or visually as a part of moving through or being in the neighborhood. It includes streets, sidewalks, parks, the facades of buildings, and access to structures. Concern for the public realm is thus implied in many aspects of the plan, but especially in principles for street design and in general urban design guidelines. In the Central Waterfront, particular attention needs to be paid to the design of east-west streets, which should better reflect their importance as centers of activity and as connections between neighborhoods. New buildings should reflect the special qualities of the neighborhood, especially its fine-grained physical texture and its historic character. Open space needs to be improved and expanded and public ways should link important places in the neighborhood.



III Plan Elements

1. Land Use | 2. The System of Parks and Open Spaces | 3. Historic Preservation | 4. Moving About |
5. Urban Design



This is the heart of the plan. It contains the objectives, policies, principles, and guidelines that together support the overall goals of the plan presented earlier. There are five main subject areas: Land Use, the System of Parks and Open Space, Historic Preservation, Moving About, and Urban Design.

1

Land Use

OBJECTIVE 1

Reinforce the Central Waterfront's character as a place for living and working.

OBJECTIVE 2

Strengthen and expand the Central Waterfront as a residential, mixed use neighborhood.

OBJECTIVE 3

Reinforce the Central Waterfront's role as an important location for production, distribution, and repair activities.

OBJECTIVE 4

Protect maritime and maritime-related activities in the Central Waterfront.

OBJECTIVE 5

Encourage the presence of shops and services that will serve residents, workers, and visitors.

OBJECTIVE 6

Encourage new development to be oriented to transit, pedestrians, and bicycles.

This section presents the vision for the use of land in the Central Waterfront. It identifies activities that are important to protect or encourage and establishes their pattern in the neighborhood. This pattern is based on the need to create a balance between providing space for production, distribution, and repair, and encouraging the development of a vibrant housing and mixed use area. Where and how these activities occur is critical to ensuring that any change the neighborhood experiences in the future contributes positively to the city as well as to the area's vitality, fostering the Central Waterfront as a place to live and work.

OBJECTIVE 1**Reinforce the Central Waterfront's character as a place for living and working.**

To reinforce the Central Waterfront as a residential neighborhood, land use controls must allow for the expansion of housing beyond the few areas where it is now permitted as-of-right. A place for living also means it is a place where everyday needs can be met; neighborhood-serving businesses should be encouraged where they will best serve workers and residents. In order for the Central Waterfront to continue in its role as an important location for PDR businesses, land must be designated for such uses and controlled in a more careful fashion than the existing industrial (M-2) designation permits.

Policy 1.1**Establish land use districts that foster the Central Waterfront's mixed use character.**

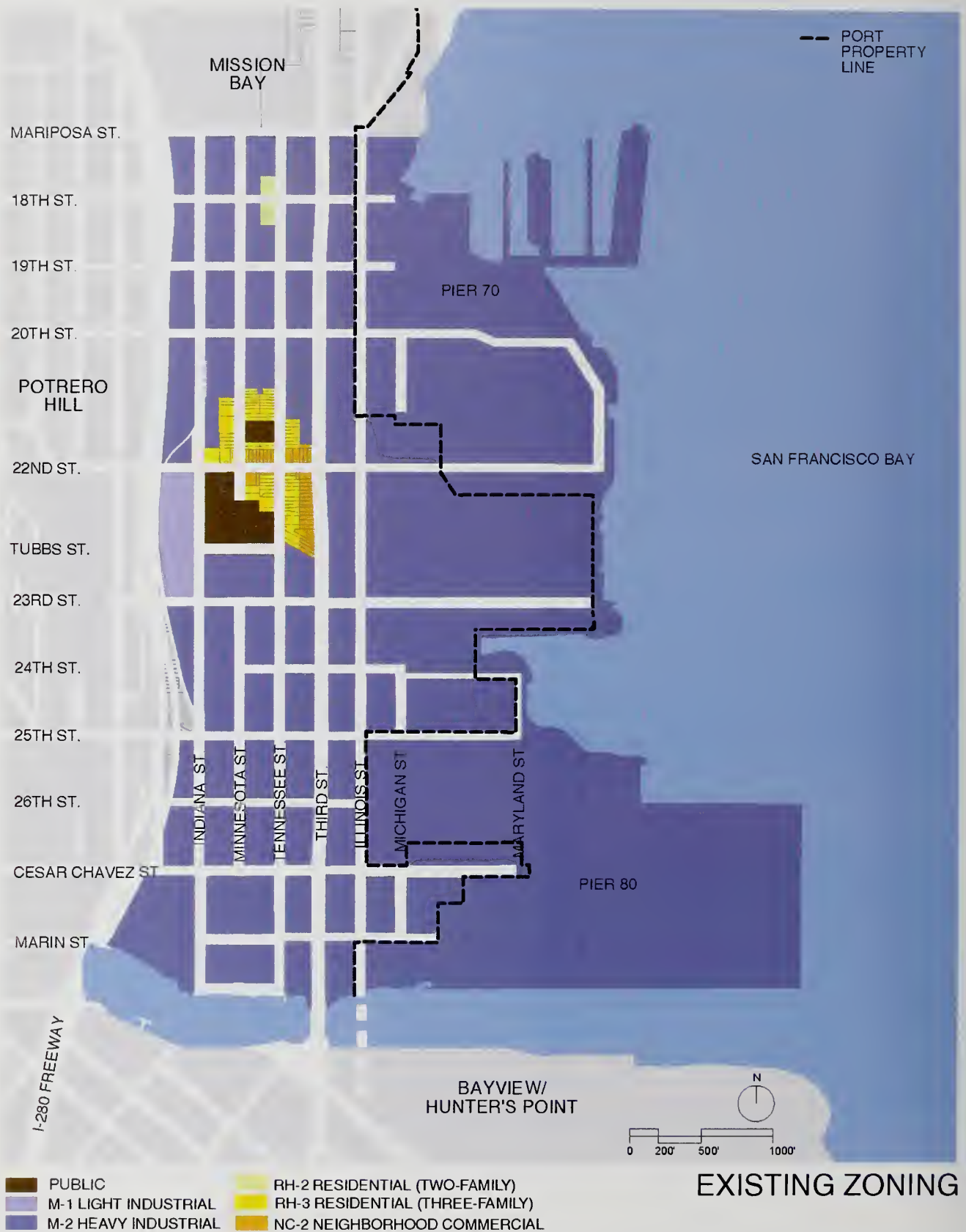
The following general principles guided the process for determining the land use designations that would be appropriate for the Central Waterfront:

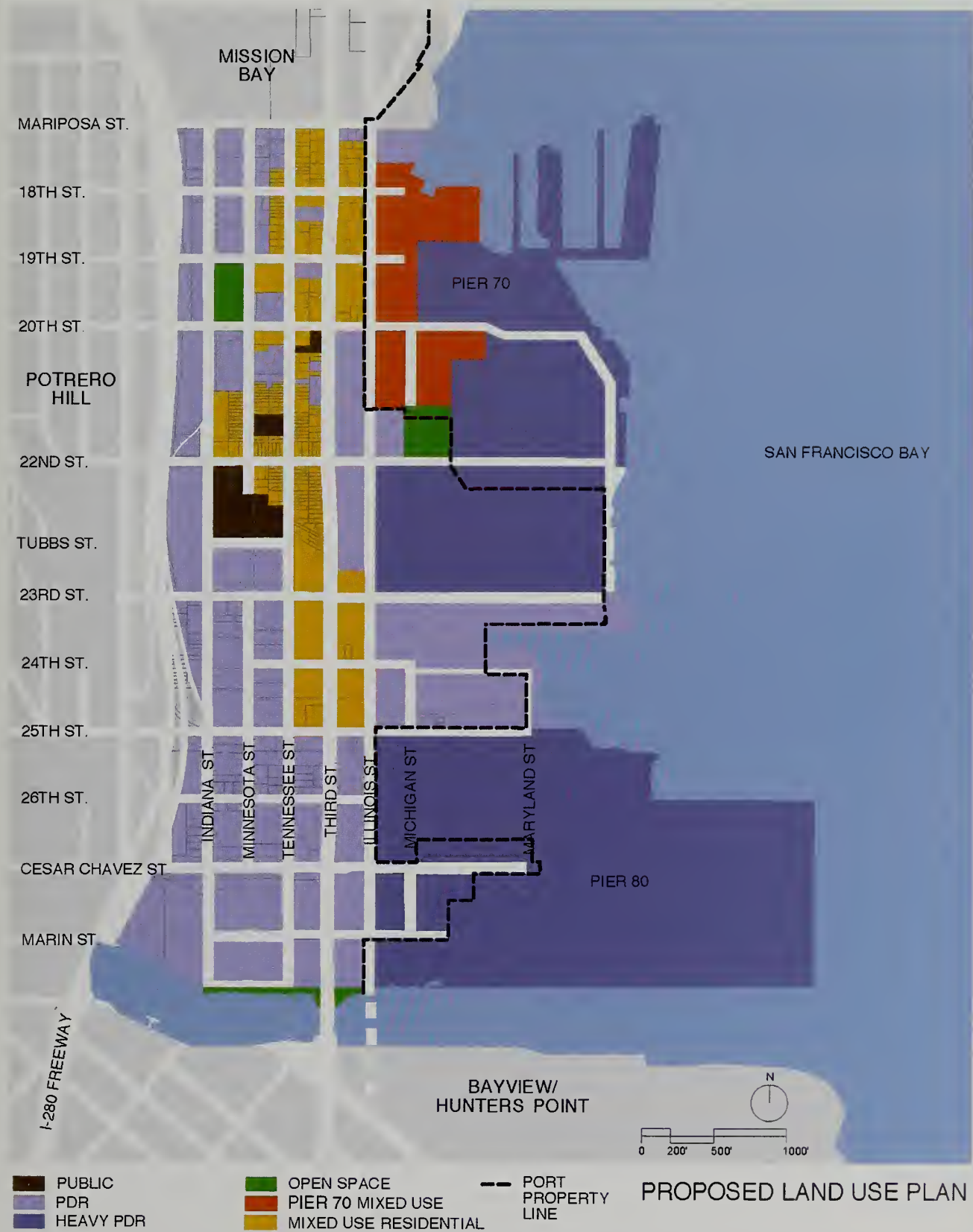
- Preserve the character of the Central Waterfront
- Encourage additional housing
- Establish residential mixed use areas
- Protect important production, distribution, and repair activities, especially south of 23rd Street

Central Waterfront Mixed Use Residential District

The Central Waterfront Mixed Use Residential District (CWMURD) is a moderately scaled and moderately dense transit-oriented residential district centered on the existing Dogpatch residential enclave. It includes those parcels in the area most appropriate for new housing or neighborhood commercial development because of the opportunity for infill development, their suitability for housing, and the presence of less important PDR structures than those found in the PDR District. The CWMURD is separated from the most intensive heavy industrial uses in the area by at least a one-half-block-wide PDR District.

1





The Mixed Use District would enable the creation of up to 1,100 housing units in the Central Waterfront within 5 years, and up to 1,600 housing units over the next 20 years, according to the Planning Department's analysis of sites likely to be redeveloped.

This district is intended to protect existing housing enclaves and encourage new housing and neighborhood commercial activities. PDR activities compatible with housing are permitted as of right. The controls governing this district distinguish permitted uses based on building story, similar to traditional NC district controls in San Francisco. Residences are permitted at all stories of buildings. Neighborhood retail, housing-compatible PDR, and small office uses are principally-permitted uses on the ground floor; a smaller subset of these commercial uses are permitted on the 2nd floor; on the third floor and above only housing is permitted. Neighborhood-serving retail is encouraged throughout the district, but is required on the ground floor of new development along a portion of 22nd Street and around transit stops on Third Street at 20th and 23rd Streets. To help ensure that retail businesses are primarily neighborhood serving, a conditional use permit is required for individual retail uses greater than 5,000 square feet. Office uses are restricted to less than 5,000 square feet.

Central Waterfront Proposed Zoning Districts and Uses

Note: This is a very generalized table. A detailed zoning table is included as an appendix of the plan.

P = permitted as a principal use

NP = not permitted as a principal use

X = permitted as accessory use (max 20% of total square footage) to a principally permitted use

C = permitted as a principal use by Conditional Use authorization only

Use	Zone: <i>Mixed-Use Residential</i>	<i>PDR</i>	<i>Heavy PDR</i>	<i>Pier 70 Mixed Use</i>
Dwelling Unit	P (permitted all floors; required above 2nd floor)	NP	NP	NP
Office	P (1st and 2nd floors only)	NP, X	NP, X	NP, X
R&D-related office	NP	NP	NP	P
Retail	P (1st floor, 2nd floor limited)	P	X	P
Light PDR	P (1st and 2nd floors only)	P	P	P
PDR	NP	P	P	P
Heavy PDR	NP	NP	P	C
Noxious Uses	NP	NP	NP	NP
Research & Development	NP	P	P	P
Institution	C	C	NP	C
Arts and Arts Activities	P	P	NP	P

Small assembly and entertainment uses (occupancy less than 100) are permitted, medium-sized uses require a conditional use and are allowed only on 3rd, 22nd, and 24th Streets. Large assembly and entertainment uses (occupancy greater than 750) are not permitted anywhere in the Central Waterfront MUD.

More intense development is encouraged around transit nodes and along certain sections of Third Street. In these areas parking minimums are replaced by parking maximums, and height, bulk, and density requirements are intended to encourage well-designed, active places that support and are supported by transit service.

PDR District

The PDR District encompasses those parts of the Central Waterfront that either contain the most significant or important PDR building stock, existing vibrant PDR clusters, or are the most appropriate places for such activities because of the character of surrounding uses. To the greatest extent feasible, the boundaries of the districts establish continuous areas. However, a few non-contiguous parcels have been included because they contain substantial PDR buildings. Overall, the pattern of this district reflects the fine-grained mix of uses that characterizes the area.

This district is designed to protect existing and encourage new production, distribution, and repair activities. As such, they are not conceived of in the same way as the traditional M-1 or M-2 industrial districts, which allow increasingly wider ranges of activities. Rather, the PDR District is more restrictive because it does not allow housing (even as a conditional use, including planned unit developments), or office other than as an accessory use. Furthermore, retail is allowed only as an accessory use, with a maximum use size of 10,000 square feet for any one retail establishment. However, retail is encouraged on the ground floor of the corners facing the Muni stop at Third and Marin Streets and along Third Street north of 25th Street. Demolition of existing PDR structures is permitted only if replaced at least 1:1.

The PDR District allows a range of uses similar to those permitted in M-1 districts as currently defined in the Planning Code; exceptions include heavier and more noxious activities, institutional uses, automotive sales, and certain very large assembly and entertainment uses. Because the PDR District does not allow the more noxious activities, in some instances

HOW LAND USE DISTRICTS ARE DELINEATED

The boundaries that delineate land use districts reflect both important features that exist now and considerations for the land use pattern that is planned for the future.

The boundaries were drawn based on the following “factors” or “criteria.” As much possible, the boundaries were drawn to create coherent districts.

For the Central Waterfront MUD:

- Near existing housing
- Focused at or near transit stops
- Absence of significant PDR
- Historic resources

For the PDR District:

- Buildings with large floor plates or floor-area ratios, loading docks or areas, clerestories, and other features attractive to a range of PDR users.
- Buildings in good condition (based on field surveys and data on recent investment)
- Important clusters or concentrations of PDR activities
- Half-block areas around the power plant, Muni’s Metro East facility, and along the I-280 freeway

For the Heavy PDR District:

- The most intensive or noxious uses, maritime industrial activities, the Muni Metro East facility, and the Potrero Power Plant.

In reviewing earlier drafts of land use districts, several community members asked that the area north of 23rd Street be designated entirely as a mixed use district and that PDR be designated south of 23rd Street only. They argued that mixed use is more appropriate than PDR in relation to what is planned across Mariposa Street as part of Mission Bay, and that it makes for livelier streetfronts along 18th and 20th Streets, which everyone acknowledges to be important pedestrian connectors between the Central Waterfront and Potrero Hill. After conducting additional analysis of the uses and building stock in this portion of the plan area as a result of this public comment, and as part of the Department’s continuing refinement of the plan to optimize both its housing and PDR options, land use designations have been revised to extend the mixed use district as much as possible, while respecting a very important PDR cluster north of 23rd Street (and especially north of 20th Street). The delineation of the PDR District north of 23rd Street is based upon one or more of the following:

- parcels accommodate significant concentrations of PDR businesses,
- buildings are suitable for PDR uses,
- buildings are in good condition or have been recently improved,
- parcels are adjacent to the freeway, and so for environmental and urban design reasons are determined to be least appropriate for housing,
- the uses proposed for southern Mission Bay across Mariposa Street are designated to be “commercial industrial.” These are less appropriate neighbors to housing in the Central Waterfront than PDR would be (Mission Bay itself buffers its residential neighborhood from these uses).

it serves as a buffer between more intensive industrial uses, such as the Potrero Power Plant, I-280, and the Muni Metro East, and the Central Waterfront's Mixed Use Residential District, which is the area designated for housing expansion and neighborhood commercial development.

Small assembly and entertainment uses are permitted. Medium-sized uses require a conditional use and are not allowed adjacent to or across the street from existing residential parcels or areas designated as part of the Central Waterfront MUD. Large assembly and entertainment uses (occupancy greater than 750) are not permitted within 500' of the Central Waterfront MURD.

Heavy PDR District

The Heavy PDR District encompasses the areas that contain the most intensive PDR or industrial uses found in the Central Waterfront. It differs from the PDR District primarily in that it also allows for these uses. Because this district is based on current uses, it is not contiguous. The land use controls for this district are designed to protect existing and encourage new production, distribution, and repair activities, especially maritime and maritime-related activities. Like the M-2 districts, the Heavy PDR District permits almost all PDR and maritime activities. However, it does not allow housing at all (even as a conditional use, including planned unit developments) or assembly and entertainment. Office and retail are allowed only as accessory uses. Demolition of existing PDR structures is permitted only if replaced at least 1:1.

Pier 70 Mixed Use District

Similar to the PDR District, the Pier 70 Mixed Use District is intended to foster a lively working environment based on industrial, research and development, or creative activities. Pier 70 is very near to Mission Bay, which is planned to accommodate biotechnology firms. Mission Bay will also be the home to a new UCSF campus, now under construction. For firms that need proximity to such activities, Pier 70 may become an attractive location. Generally, uses permitted in this district allow the flexibility to create a mix of arts-oriented, light industrial, research and development (R&D), institutional, and entertainment activities. The proliferation of general office as a principal uses is not allowed. However, a limited amount of office space related to or supportive of R&D, creative, or industrial activities at Pier 70 or the immedi-

ate area is permitted. This district allows more office use as a percentage of the total site area than would be allowed under normal rules for accessory uses—as long as a significant proportion of the overall site square footage is used for research and development activity. Retail activities up to 10,000 square feet are allowed, as is retail that is accessory to primary uses. Small and moderately scaled assembly and entertainment is permitted by right. Housing is not allowed.

OBJECTIVE 2

Strengthen and expand the Central Waterfront as a residential, mixed use neighborhood.

One of the primary goals of the plan is to address the city's ongoing need for housing. While this goal is related to larger, citywide needs, more housing can also be a great benefit to the immediate neighborhood, especially to the lightly populated Central Waterfront. An increase in the area's residential population is critical to creating a more practical place to live, and to bolstering the community in general. Currently, little of the Central Waterfront is zoned to allow housing as-of-right; an expanded area should be designated that allows housing and housing-compatible activities.

Policy 2.1

Designate areas for new housing and maximize the opportunities for new residential in-fill, especially affordable housing.

Appropriate areas for new housing must be established in order to properly encourage its development. Such areas should build on existing housing and mixed use areas, and take advantage of features of the neighborhood that are most supportive of housing and community while balancing the need to preserve important areas of PDR. Residential only districts are not delineated separately. Rather, housing is permitted as-of-right, and is required above the second story, as one component of the mix of uses of the Central Waterfront MUD. Converting existing residential land use designations to the Central Waterfront MUD designation will not remove any protections from the existing residential buildings, and will help to create more consistent and coherent districts.

See policy 1.1 for a discussion of how and where areas were designated for new mixed use residential development.

Policy 2.2

Encourage compatible uses and activities to mix in areas not designated for PDR or Heavy PDR uses.

One of the defining elements of the Central Waterfront is its unusual mix of uses. Because such a collage can help to create a distinctive and vibrant neighborhood, areas should be designated that allow certain PDR uses, residences, and neighborhood commercial businesses to be near one another, and in some instances, to occupy the same building. Some PDR activities are compatible with housing because they do not generate significant noise, fumes, early-morning or late-night activity, or do not use or create large amounts of hazardous or toxic materials. These uses are defined in Policy 1.1 as part of the Central Waterfront MUD.

The intermingling of these kinds of PDR activities and housing is part of what makes the Central Waterfront an unusual, intriguing, and functional place.

Policy 2.3

In the Central Waterfront Mixed Use Residential District, discourage the continuation of PDR activities that are incompatible with housing.

Some PDR activities are incompatible with housing because they generate significant noise, fumes, early-morning or late-night activity, or use or create large amounts of hazardous or toxic materials. In order to ensure that existing and future residential areas can prosper, they should be protected as much as possible from such uses. These uses are defined in Policy 1.1 as part of the Central Waterfront Heavy PDR and Central Waterfront PDR land use designations.

Policy 2.4

Discourage the demolition of existing housing.

The existing housing stock is essential to the character of the neighborhood, especially historically, and is an important resource. Demolition of existing sound housing should be discouraged. Development that would result in a net decrease in the number of housing units on a parcel should be rejected.

Policy 2.5**Eliminate dwelling-unit density maximums.**

Traditionally, the number of units allowable in a given structure is established by setting a maximum number of units or by a ratio of units to lot size (for instance the RM-1 designation allows one dwelling unit per 800 square feet of lot area). This method of determining density restricts flexibility in meeting diverse housing needs. Developers should be allowed to build any number of residential units within the established height and bulk limitations, subject only to building code restrictions. This would allow developers to produce a higher number of smaller units or a lower number of larger units as needed, rather than being constrained by density restrictions that may not reflect market realities. Compatibility of such buildings with neighborhood character is addressed by the policies pertaining to height and bulk in the Urban Design section.

Policy 2.6**Produce housing for a variety of household sizes and income levels, and for a mix of rental and ownership housing.**

Developing a wide variety of new housing units of various sizes, styles, and prices, will help to ensure economic, ethnic, family, and lifestyle diversity.

Policy 2.7**Require or encourage that parking costs be separated from housing prices or rents in new residential development.**

Currently, most new ownership and rental housing has parking included in the base price of a unit. This encourages auto ownership and use because the cost for storing the vehicle is an already “sunk” and “invisible” cost. Individuals or families who do not own or need a car must pay for these spaces anyway, needlessly increasing the cost of their housing. Where possible, the city should require parking spaces to be sold or rented to residents for a price separate from that of the unit itself, so that only those who need them have to pay for them.

Policy 2.8

Establish programs, such as location-efficient mortgage lending, to lower the cost of housing built in the plan area.

The Bay Area is a pilot location for the Location Efficient Mortgage Program. This program recognizes the lower costs of transportation for households in neighborhoods that are well-served by transit and allows these households to qualify for higher mortgage amounts based on these lower transportation costs. Lenders should be encouraged to include the plan area in the eligibility zone for this new program.

Policy 2.9

Commensurate with the goals of this plan, ensure that development of the Port's Pier 70 Mixed Use Opportunity Site will support the Port's goals and that it will be complementary to the maritime and industrial nature of the area.

The Port Commission's Waterfront Land Use Plan designates a portion of Pier 70 fronting on Illinois Street between 18th and 20th Streets as one of a number of "Mixed Use Opportunity Areas," where non-maritime uses may be developed along the waterfront. These mixed use areas are intended to assist the Port in funding an extensive set of public improvements required of the Port. Because the Port does not receive city or state funding (other than from grants or bonds), it is necessary that it pursue development to help finance such improvements, which include maritime development, rehabilitation of

Artist's rendering of Pier 70 street scene after redevelopment, looking west on 20th Street.



historic resources, and the creation of public access to and open space along the Bay shoreline. At the Pier 70 Mixed Use Opportunity Site, non-maritime and non-PDR activities such as commercial and research and development uses must be carefully integrated into the larger Pier 70 area and the adjacent neighborhood so that they are not disruptive to surrounding uses. Offices, which are intended by city policy to be concentrated downtown, should not be allowed as primary uses.

Policy 2.10

Should the site of the Muni Woods facility become available for other uses in the future, it should become a high-density, mixed use residential development.

In the event that Muni consolidates or relocates its Woods facilities, surplus parcels should be developed so as to take advantage of the site's location. The Woods facility is adjacent to the 22nd Street CalTrain Station and at the end of one of Dogpatch's main neighborhood commercial streets, making high density, mixed use residential development the most appropriate use of the site.

Policy 2.11

Discourage residential development adjacent to I-280 and prohibit it adjacent to the power plant.

In most instances, the width of the street that separates differently zoned areas is a sufficient buffer between them. However, in the case of the I-280 freeway and the power plant, a more substantial buffer is called for. Because they are both sources of pollution, noise, are unsightly, and in the case of the power plant, the site of toxic materials, residences should not be located immediately adjacent to either structure.

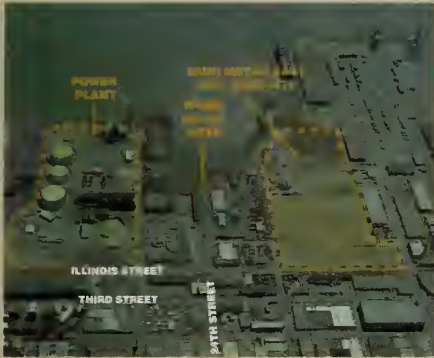
In the past, San Francisco has allowed residential development in proximity to freeways, or has allowed freeways to be built through residential neighborhoods. However, this fact should not be used as a precedent for furthering such a pattern, unless the benefits of developing housing on a location near a freeway are shown to outweigh the disadvantages. In this plan, the possibility of developing housing at the Muni Woods site, should that facility ever relocate, has been retained despite its location near I-280, because it is immediately across from the 22nd Street Caltrain Station and a few blocks from the future Third Street Light Rail. Should the use ever relocate and environmental analysis support residential development in this location, housing should be developed.



Aerial view of MUNI Woods facility.



Switching yard with power plant in background, viewed from Illinois Street.



Looking east down 24th Street toward Warm Water Cove.

Earlier drafts of the plan did allow for the potential development of 500 units of housing facing 24th Street between Illinois Street and the waterfront.



With the power plant gone, the area east of Illinois Street might ultimately support a new neighborhood of 1,900 to 2,500 dwelling units—or 4,370 to 5,750 people given San Francisco's current average household size of 2.3.

The Potential for Housing East of Illinois Street

This plan does not propose any housing east of Illinois Street. Primarily, this is due to the existence and nature of viable industrial uses in the area. The most prominent are the Potrero Power Plant, which may be expanded in the future, immediately to the north on 23rd Street and the Muni Metro East facility, now under construction, which is to the south on 25th Street near the waterfront. There has also been community opposition to earlier drafts that proposed housing along 24th Street. Concerns seem to be based primarily on the perceived environmental hazards stemming from the power plant and its expansion.

There were, however, compelling reasons for earlier drafts of this plan to allow for 500 units of housing in a mixed use district facing 24th Street between Illinois Street and the waterfront:

- Waterfront land between 22nd and 25th Streets is one of the few portions of San Francisco's eastern shoreline unencumbered by Public Trust restrictions against housing, and therefore one of the few places where there is the potential for waterfront housing.
- There seems to be no clear scientific basis that housing should be kept any particular distance from the power plant solely for reasons of public health. Limiting housing to a depth of a half-block along both sides of 24th Street allowed for a minimum ½-block buffer of non-residential land uses between both the Muni Metro East facility and the power plant. It also provided an even greater buffer between any housing and the smokestack or toxic materials storage facilities associated with the power plant, which are internal to the site.
- Housing along 24th Street could do much to activate this stretch of 24th Street, and to make Warm Water Cove an integral part of the neighborhood and therefore a safer public open space with stronger ties to the neighborhood and the city.

Potential Waterfront Neighborhood Without the Power Plant

There is some possibility that the Potrero Power Plan will not be expanded, and may in fact be phased out over time and replaced by a system of distributed power generation or alternative energy sources, or both. Should this occur, the power plant site could be an ideal location for housing, if toxics issues would not preclude it. Should the power plant move, the power plant site and the land between it and any housing fronting 24th Street could accommodate a new neighborhood of as many as 1,400 to 2,000 units of housing. This assumes that one-third of the land is given over to public right-of-ways and open space and the remainder is developed at a density of 75 to 100 units per acre. All together under this scenario, then, the area east of Illinois Street ultimately might support a new neighborhood of 1,900 to 2,400 dwelling units—or 4,370 to 5,750 people (based on San Francisco's current average household size of 2.3 people).

OBJECTIVE 3

Reinforce the Central Waterfront's role as an important location for production, distribution, and repair activities.

PDR businesses continue to be an important part of the city's economy, even as it changes. The Central Waterfront has long been a center of PDR activity, from rope manufacturing to sugar refining, from container handling to printing, warehousing, and garment manufacturing. While many of the particular industries and businesses have changed, the area remains primarily industrial. To foster and protect PDR activities, a place must be preserved for them where they will not have to compete with other uses, especially housing and office, which generate higher rates of return. Moreover, the area designated for PDR activities should also protect good existing building stock. If existing buildings are destroyed, affordable PDR space will be lost. Even if new PDR buildings replaced old ones, they would not be affordable to many PDR industries because of higher land and construction costs. By preserving the kind of space and buildings found in the area, in effect building on the neighborhood's character, the Central Waterfront will be able to sustain existing businesses and encourage new PDR, creative endeavors, and incubator firms that are important to the city's economy.

Policy 3.1

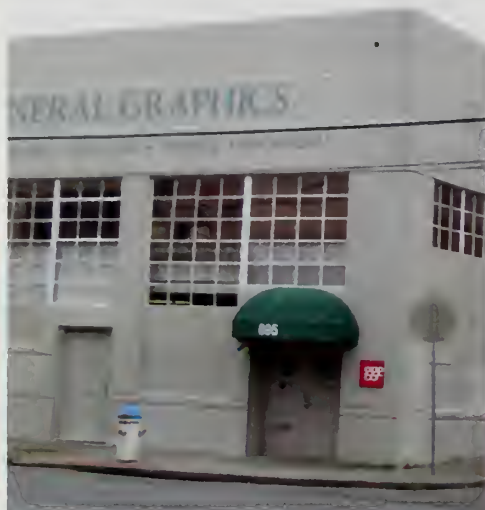
Provide space for production, distribution, and repair activities.

The special real estate requirements of PDR businesses, including creative industries and incubator firms, must be met in order for them to thrive. Thus, land should be designated for PDR activities where appropriate structures, yards, and storage areas can be maintained and encouraged, and where such functions can persist without threat of displacement by non-PDR uses.

Policy 3.2

Discourage demolition of existing, sound PDR buildings.

It is important to maintain building stock suitable to PDR. The city's supply of PDR structures has dwindled substantially as a result of demolition and conversion to other uses, particularly office and live/work development. Existing PDR buildings should be retained as long as possible because they are more



The Central Waterfront is home to several clusters of creative activities, such as printing, publishing, and graphic design.



Many flexible PDR structures exist throughout the Central Waterfront.

affordable and well-suited to a wider variety of PDR businesses. New construction is almost always more expensive because sunk and capital costs have not yet been recovered by the builder or developer. Within districts designated for PDR, prohibit demolition of sound structures unless new buildings suitable to PDR uses replace them at least at a 1 to 1 ratio. Buildings suitable to PDR typically have large floor plates, interiors designed for flexibility, and often have loading docks or areas, clerestories, and other features attractive to a range of users.



The area has seen recent investment in new PDR structures.

Policy 3.3

Promote redevelopment or infill of PDR uses at underutilized sites in PDR and Heavy PDR districts.

Encourage sites that currently have structures of marginal value or that are either economically or visually “soft” to be redeveloped with more intensive PDR buildings and uses.

Policy 3.4

Encourage development of flexible buildings with high floor-to-ceiling heights, large floor plates, and other features that allow adaptability to changes in use.

In order to thrive, PDR businesses require certain kinds of buildings. The stock of these buildings should be improved and expanded in order to support existing PDR businesses and encourage new ones to locate in areas designated for them.

Policy 3.5

Prohibit construction of new housing and office in PDR and Heavy PDR districts.

As mentioned elsewhere in this plan, most PDR businesses are unable to compete successfully with residential and office uses, which command much higher returns per square foot. Furthermore, PDR businesses need places uninhibited by incompatible uses. For instance, some PDR business must use noxious materials, receive goods early in the morning, or store equipment out of doors; residents tend to be sensitive to these kinds of things, and have the ability to force businesses away if they consider them disruptive or unsightly. Therefore it is critical to establish areas that will allow PDR businesses to operate without the threat of displacement by competing or incompatible uses.

**Policy 3.6**

Enhance the infrastructure and working environment within areas designated for PDR and Heavy PDR to serve business and industry.

The physical environment, particularly streets and services, should be optimized to support the activities of businesses located in PDR and Heavy PDR areas. Businesses should be surveyed to determine what improvements would help their activities; results should be implemented to the fullest extent possible.

Refer to the Moving About section for a discussion of proposed street treatments for PDR areas.

OBJECTIVE 4

Protect maritime and maritime-related activities in the Central Waterfront.

The Central Waterfront has long been the home to maritime activities, including the existing dry dock. As a response to the advent of containerization in the 1960s, the Port of San Francisco began to focus its cargo operations at Pier 80, and south of Islais Creek at Piers 94-96. Maintaining and supporting these activities, including ship repair, maritime support, warehousing and storage, and shipping, is important to both the Port's mission and more generally to San Francisco's economy. The various industrial activities occurring on and near Port land need to be able to carry out their operations without the impediments caused by the presence of sensitive land uses such as housing or neighborhood-related activities.

Policy 4.1

Support the continued operation of the dry dock facility at Pier 70.

Shipbuilding and ship repair have been carried out at the Pier 70 dry dock since the late 1880s. In fact, Pier 70 is the longest continually operating, non-military dry dock on the West Coast. Any development adjacent to the dry dock facility should not impinge on its use. In particular, to avoid conflict, uses sensitive to a 24-hour, industrial operation should not be located nearby.





The Pier 80 facility handled fifty thousand cargo containers in 2000.

Policy 4.2

Support the continued operation of the Pier 80 container facility.

The Port's terminal at the 69-acre Pier 80 is in active use, providing the Port and city with modern container- and non-container-cargo handling facilities. The businesses at and related to Pier 80 are well integrated with the city's economy; they employ a substantial number of people, generate income for the Port, and taxes for the city. Continued, efficient access by freight rail and truck from the peninsula, freeways, and via city streets is fundamental to the viability of the pier and the industries related to it. Therefore, land use and transportation infrastructure in the vicinity of Pier 80 should not be changed in ways that would interfere with its continued efficient operation, or impinge on access to it.

Policy 4.3

To better serve businesses and industry, enhance the infrastructure and working environment within areas designated for maritime uses.

The physical environment, particularly streets and services, should be optimized to support the activities of maritime uses located in PDR and Heavy PDR areas. In coordination with the Port, businesses should be surveyed to determine what improvements would help their activities; results should be implemented to the fullest extent possible. Refer to the Moving About section for a discussion of proposed street treatments for PDR areas.

OBJECTIVE 5

Encourage the presence of shops and services that will serve residents, workers, and visitors.

Neighborhood commercial uses not only provide for private or personal needs, but are also an important part of the public realm in that they help to activate streets and so emphasize the role of streets as public gathering places. Such uses make streets safer, more interesting, enjoyable, and generally help to define a "neighborhood heart." The Central Waterfront now has a dearth of shops and services, largely a result of the area's small population. In order to attract local-serving businesses, the neighborhood's residential population must increase. Growth in the number of employees and visitors will

also help to sustain a wider range of amenities. Land use designations and controls should encourage, and in some instances require, space for neighborhood commercial businesses. However, the economic ability of the Central Waterfront to support new neighborhood commercial businesses is and will be limited, even should the neighborhood grow to the full potential of this plan. Therefore, caution has been taken not to require too much neighborhood commercial activity, and instead to allow it as an option in most of the Central Waterfront MUD. This will allow the market to determine what is possible in the neighborhood while ensuring that if and when it does occur, it will be in the right places and done in the right ways.

Policy 5.1

Require ground-floor retail in places along 22nd Street between Third and Minnesota Streets.

Twenty-Second Street is already the focus of retail activity for the neighborhood and is the street that connects the CalTrain Station to Third Street. Requiring retail on the ground floor between Third and Minnesota Streets builds on the existing character of the street, concentrates activity, and helps to create a “neighborhood heart.”

Policy 5.2

Encourage retail development as part of any development proposed for the Pier 70 Opportunity Site.

Development of the Pier 70 Opportunity Site will greatly increase activity in this part of the Central Waterfront and will provide the chance to bring the neighborhood and the waterfront together. To realize the potential of this connection, limited retail or entertainment uses should be included in any development for the Opportunity Site. Such uses will make residents and visitors feel welcome, and will support proposed open space for Pier 70 by helping to make the area safer and more vital through a diversity of uses.

The addition of 1,500 housing units in the Central Waterfront would internally support an additional 25,000 square feet of neighborhood retail. The Planning Department's analysis indicates plenty of capacity exists for this amount on sites likely to be seen in new development, with more possible should the market strengthen beyond simple local neighborhood patronage.

Policy 5.3

Encourage limited retail and entertainment attractions at the eastern terminus of Mariposa Street.

Mariposa Street ends at a point near the Bay occupied by a restaurant, a boat repair facility, and new access to the shoreline. Any change to this area should complement the existing uses and take advantage of the dramatic backdrop provided by San Francisco Bay and the San Francisco Dry Dock. Retail and entertainment uses both support and are supported by unusual destinations such as this, and help to bring activity and thereby a feeling of safety to places that do not benefit from busier locations. With the right combination of active uses, this unique place could become a destination not just for San Franciscans but also for people around the Bay Area.

1



Policy 5.4

As described elsewhere in this plan, increase housing and encourage the retention and expansion of PDR employment.

Without a growing residential and worker population, and without good accessibility, new neighborhood commercial businesses will be unlikely to come to the Central Waterfront.

OBJECTIVE 6

Encourage new development to be oriented to transit, pedestrians, and bicycles.

In order to create a vibrant and livable neighborhood, new development in the Central Waterfront must both take advantage of and support a variety of modes of transportation. Land use plays a critical part in promoting alternatives to the car. For instance, bus lines require a certain density to function efficiently, pedestrians feel comfortable walking when streets are lined with active uses and services are not distant, and bicyclists need a share of the roadway and places to lock their bikes. As land use changes in the Central Waterfront, it must do so in ways that will ensure as much as possible that people are mobile and the neighborhood is accessible.

Policy 6.1

Focus higher density mixed use development around transit nodes.

A powerful synergy is created when higher density development is located around transit nodes. The activity that comes with more concentrated use of land supports transit use, partly by making the immediate area safer and more appealing. This arrangement also brings passengers within reach of transit, making alternatives to the automobile appealing. Furthermore, housing in close proximity to good transit service can be built with less parking, making the housing more affordable. Similarly, commercial uses are more accessible and thus more convenient, allowing people to meet their daily needs by using transit instead of relying on the automobile. In turn, businesses near transit benefit from the increased activity.

Policy 6.2

Require neighborhood commercial uses on the first floors of the corners facing light rail stops on Third Street at 16th, 20th, and 23rd Streets.

Concentrating neighborhood services and retail at the most important light rail stops establishes these places as important neighborhood destinations. Such uses help to focus activity, making both the stations and the nearby areas safer, more welcoming, and more practical. Retail uses are encouraged, but not required, on Third Street at the Marin Street light rail stop.

Policy 6.3

Require new development to incorporate design features that support pedestrians, bicyclists, and transit users.

Refer to the Urban Design section for a discussion of such features.

2

The System of Parks and Open Spaces

OBJECTIVE 1

Create a linked system of new and improved open spaces within the neighborhood and along the shoreline. Connect this system to transit stops and other major or important destinations through a network of pathways and improved public right-of-ways.

Public parks, plazas, and open space areas are critical neighborhood enhancing and defining elements. In a successful urban neighborhood, these spaces will complement and enhance open space provided as part of public streets. Well-located parks and plazas can knit together surrounding areas by providing a variety of active and passive recreational activities and informal gathering places for the neighborhood. Open spaces provide a venue for people to gather and socialize or simply to enjoy a quiet space in the midst of activity. A successful open space system enlivens and supports the neighborhood by including a variety of convenient, accessible, and attractive public spaces serving different purposes.

OBJECTIVE 1

Create a linked system of new and improved open spaces within the neighborhood and along the shoreline. Connect this system to transit stops and other major or important destinations through a network of pathways and improved public right-of-ways.

The Central Waterfront has little developed open space and there is only limited opportunity to create more. Therefore, this plan focuses not just on enhancing and adding to existing open space but on improving the connections to and between them. This is to be done in two ways. First, it is important to link existing parks and planned open space to important destinations within the neighborhood and to adjacent areas. Doing so will help both to enliven the open space and to orient people as they move about the neighborhood. Second, existing and future open spaces should be connected to each other. A network of open space has a more substantial pres-





Esprit Park is the area's primary neighborhood park.



Warm Water Cove today.



Aerial view of Warm Water Cove, looking west, showing proposed park expansion and enhanced public access connections.

ence than small and unrelated parks. Furthermore, a well-developed system of parks and open spaces is a substantial part of neighborhood character, making a more attractive, interesting, and pedestrian-friendly place.

It is important to recognize that an essential part of our open space is created by our system of public streets. In order to be successful, the system of parks and open spaces must be predicated on well-designed streets and sidewalks. This is discussed further in Moving About, the System of Public Ways.

Policy 1.1

Ensure that open spaces are linked by the public street system and that the street system serves as an extension of the open space system.

Certain streets should receive special treatment, including benches, lighting, tree planting, way-finding signs, widened sidewalks, and bulb-outs. These features make the street more welcoming, not just to move along, but as a destination in and of itself. In conjunction with well-conceived land use patterns, such streets mark a space belonging to people—an essential element for successful urban open space. Such features are discussed in the Moving About and Urban Design sections.

Policy 1.2

Establish and improve publicly accessible parks at waterfront destinations.

Development at the Port's Pier 70 opportunity site should include open space at the water's edge, taking advantage of its striking setting and scenic Bay views. In particular, the Port should be encouraged to create a public waterfront at the end of 18th Street to serve as both a neighborhood and regional destination.

Warm Water Cove should be improved. In order to attract the activity necessary to making Warm Water Cove a pleasing and safe destination, it should be better connected to the rest of the neighborhood through pathways and improvements to public right-of-ways. This open space should be expanded along the water's edge to the north and south. New development should be designed so that it does not "turn its back" on Warm Water Cove and should serve to extend the open space inland as much as possible. Related discussions appear in the Land Use and Urban Design sections.



Artist's rendering of potential waterfront open space and public access between 20th and 22nd Streets.

2



The Port should be encouraged to create new open space where possible along the water's edge, especially at Pier 70-72 (between 20th and 22nd Streets), and at the end of Mariposa Street.

Open space improvements and development should be pursued in association with future implementation of the Bay Trail.

Policy 1.3

Enhance public access to the waterfront through the use of pedestrian and bicycle paths.

Routes designed especially for pedestrians and bicycles will encourage access to the waterfront and provide an active edge to the shoreline. Refer to the Moving About section for further discussion of pedestrians and bicycles.



Policy 1.4

Clearly mark the Bay Trail where it passes through the Central Waterfront, and move it closer to the Bay as opportunities become available.

The Bay Trail is an important element of the Bay Area's recreation and open space system. The route that it takes should be clear to people—particularly important in a busy, working, urban area such as the Central Waterfront. The intent of the Bay Trail is that it should follow the shoreline wherever possible. As opportunities become available, the trail should be moved toward the Bay, and be incorporated into existing and future open space. Refer to the Moving About section for further discussion of the Bay Trail.

Policy 1.5

Work with the Port of San Francisco and PG&E to preserve Irish Hill and convert it into a neighborhood open space and natural historic monument.

Irish Hill was once a prominent feature of the Central Waterfront, serving as the home for workers in the nearby mills from the 1880s until World War I, when the hill was mostly leveled to make way for expansion of the shipyards. While little of the original bluff remains, it is an unusual reminder of the area's history. The remnant of Irish Hill should be evaluated for its potential to be a successful open space. Pending this evaluation, its transformation into a unique public green space and a final destination on the waterfront from Potrero Hill and the Central Waterfront should be pursued.

Implement the following:

- Establish passive uses of the space.
- Add pedestrian pathways along the hill and one that reaches the top, culminating in a lookout. All pathways should be natural and reflect the character of the hill.
- Provide a park edge to add definition to the hill. To the west, it should be met by a pathway connecting Minnesota, Tennessee, and 22nd Streets. To the east, any future development should appropriately address the park.
- Add a sidewalk edge along 22nd Street.
- Add benches, especially on 22nd Street.
- Place a marker that illustrates the hill's historic importance to the neighborhood and city.



Aerial view of Irish Hill showing recommended access enhancements.



Irish Hill today, viewed from Illinois Street.



Aerial view of proposed public path/open space at Tubbs Cordage Factory alignment.



Islais Creek and existing public promenade.

Policy 1.6

Work with private landowners to convert abandoned rail alignments into public open space and access.

Pursue acquisition or conversion of the curved alignment between the Caltrain Station and 20th Street. Comprised of two lots, both were former railroad right-of-ways. They are currently privately owned and are used as parking lots. Incorporating these into the system of public ways would help to create a functional, interesting, and attractive pedestrian route between Caltrain, future development at Pier 70, and other neighborhood destinations. Where there are other such opportunities, they should be pursued.

Policy 1.7

Pursue acquisition or conversion of the Tubbs Cordage Factory alignment to public access. Should it be infeasible to purchase the necessary property, future development should include the improvements outlined below.

Develop the area marking the historic alignment of the Tubbs Cordage Factory into a public pedestrian passage or open space that connects Tennessee and Third Streets. This will improve the connection between the Caltrain station and the planned 23rd Street light rail stop.

The following improvements should be made:

- Good night-time lighting for pedestrian safety and comfort.
- No low landscaping; in an already sheltered place, bushes and low plantings can create a foreboding environment for pedestrians.
- If benches are provided, they should be placed only at the street.

Policy 1.8**Develop a continuous loop of public open space along Islais Creek.**

Currently, public access to the creek is provided on the north side at the end of Tennessee Street. The area is hardscaped to cover a sewage outfall facility. On the south side of the creek is a handicap-accessible put-in for non-motorized watercraft. On the east side of the Third Street Bridge is Tulare pocket park. None of these spaces are well used (except by skateboarders, who use the outfall cover) because they are not easily reached, are small, and feel isolated and disconnected. As much as possible, future development should be required to contribute to the creation of a continuous loop of publicly accessible open space, and should themselves help to activate it. The loop should run from Illinois Street west along the northern edge of the creek, turning at the end of the creek to run east along the southern edge, ending at the 3rd Street Bridge. The Islais Creek loop should be linked to any new open space or landscaping created on Piers 90-92. Street treatments should integrate Islais Creek into the system of neighborhood open space. Public projects, for instance Muni's planned Islais Creek bus maintenance yard, should also include design features or funding that supports the development of open space here.

Policy 1.9**Convert the area behind the I. M. Scott School into public open space.**

The paved area behind the I.M. Scott School is currently used as parking. Because the neighborhood has a dearth of open space, and because the school is not fully utilized, the area would better serve the community as a mini-park or landscaped playground.

I.M. Scott School property, viewed from Minnesota Street.



3

Historic Preservation

OBJECTIVE 1

Preserve notable landmarks in the Central Waterfront of historic, architectural, or aesthetic value, and promote the preservation of other buildings and features that provide continuity with the past.

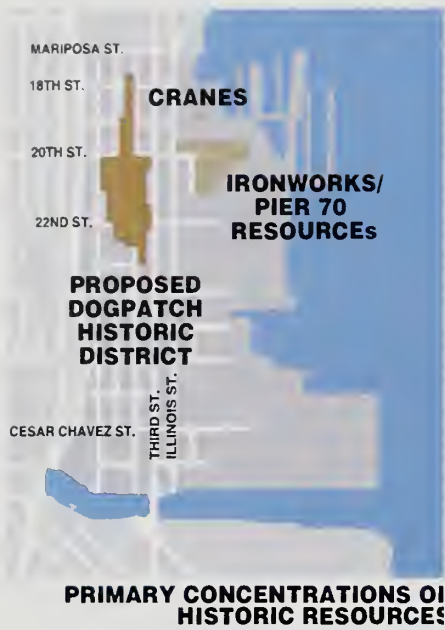
OBJECTIVE 2

Use care in rehabilitating older buildings to enhance rather than weaken their original character.

The Central Waterfront is home to a significant concentration of historic and potentially historic structures, from 19th Century Victorian worker's homes in Dogpatch, to Union Ironworks buildings at Pier 70, to the 3rd Street Bridge. Together, they provide an evocative glimpse into the area's history and thus to the origins of much its character today.

In October 2000, the Planning Department commenced its Citywide Cultural Resource Survey program by surveying more than 140 resources built before 1956 in the Central Waterfront area. An independent survey examined the mostly residential structures in the Dogpatch area, located within the Central Waterfront survey boundaries. From these studies, each resource was evaluated as to its potential eligibility for inclusion in the National Register of Historic Places. These surveys form the basis of this section of the plan.

Protection of individually designated resources, or those located within historic districts, must also be accomplished through comprehensive planning and coordination with other land use laws. Preservation ordinances alone are often insufficient to protect cultural resources unless integrated with General Plan objectives and policies for land use, transportation, and housing. Such is one of the purposes of the objectives and policies of this plan.



OBJECTIVE 1

Preserve notable landmarks in the Central Waterfront of historic, architectural, or aesthetic value, and promote the preservation of other buildings and features that provide continuity with the past.

San Francisco recognizes locally designated landmarks through Article 10 of the Planning Code. Other resources are listed in the California Register of Historical Resources or the National Register of Historic Places. The city, using its regulatory and planning powers, should place a high value on these resources.

Policy 1.1

Encourage preservation and rehabilitation of historic buildings and resources.

Whenever possible, cultural resources should be conserved, rehabilitated, or adaptively used. Over time, many buildings outlive the functions for which they were originally designed, and they become vacant or underused. Adaptive use proposals can result in new functions for historic buildings. Significant architectural features and elements should be retained and incorporated into the new use, where feasible.

Many resources throughout the Central Waterfront area are of architectural merit or provide important links to the history of the area as one of the city's earliest and most active industrial areas. Outside of the historic Dogpatch enclave, which is recommended for historic district designation (see to Policy 1.2), over 110 notable buildings and features (primarily commercial and industrial buildings and infrastructure) of historic or architectural significance worthy of preservation have been identified and rated through a comprehensive and systematic review.



Central Waterfront survey area pictured between 1929 and 1934. Planning Department photo.

Policy 1.2

Provide resources for the maintenance and periodic update of the Central Waterfront Cultural Resource Survey.

From October 2000 to October 2001, the Planning Department surveyed more than 140 resources built before 1956 in the Central Waterfront area. The Dogpatch area, which is located within the Central Waterfront survey boundaries, was surveyed separately. As new information comes to light on these resources and as newer buildings age, the survey should be reviewed periodically to ensure continuity. Additionally, the Central Waterfront and Dogpatch cultural resource surveys should be integrated and given full consideration in all land use planning activities in the Central Waterfront.



Administration Building (Building #101), Pier 70.

Policy 1.3

Protect groupings of cultural resources that have integrity, convey a period of significance, and are recognized through the creation of historic or conservation districts.

Designated historic districts or conservation districts have significant cultural, social, economic, or political history, as well as significant architectural attributes, and were developed during a distinct period of time. When viewed as an ensemble, these features contribute greatly to the character of a neighborhood and to the overall quality, form, and pattern of San Francisco.



Office Building (Building #104), Pier 70. Port photo. 2002.

Policy 1.4

Preserve historic elements of the Maritime and Industrial Area east of Illinois Street.

The Central Waterfront's rich history is represented not only by the houses and structures found in Dogpatch, but also in the unique, largely intact collection of historic and architectural resources found on Port-owned property. In particular, within the Pier 70 area, there are a number of resources that collectively could be eligible for designation as a local, state, or national historic district.

While the majority of these structures are in various states of disrepair and many are no longer suited to modern maritime operations, the city and the Port should work together to preserve, restore, and reuse as many of these historic resources as possible.

Policy 1.5

Consider designating resources, both individually and through historic districts, in the Central Waterfront and Pier 70 to local, state, or national historic registers.

A recently completed Planning Department study of cultural resources in the Pier 70 area confirmed that a large number of structures are architecturally and historically significant. Although work has not commenced to designate these resources, the Port and the Planning Department should continue to work together to consider individual landmark nominations for Buildings 21, 101, 102, 104, 113/114 at Pier 70, and possibly other structures. Additionally, the Port and Planning Department should continue to work together to consider the creation of a Pier 70 or Potrero Point National Register Historic District. Another resource that should be given landmark consideration is the Kneass/Twig Boat Works Building at 651 Illinois, possibly the oldest commercial building in the Central Waterfront.

Policy 1.6

Obtain designation for the Dogpatch Historic District and other important historic resources.

Dogpatch, formerly known as Dutchman's Flat, is a nine-block primarily residential area in the Central Waterfront constituting the oldest and most intact surviving concentration of Victorian-era industrial workers' housing in San Francisco. The district, concentrated mostly along Tennessee and Minnesota Streets between Tubbs and 18th Streets, is comprised of almost one hundred flats and cottages, as well as several commercial, industrial, and civic buildings, most of which were erected between 1870 and 1930.

The shipyards, rope factories, canneries, and other industries in the Central Waterfront required a steady supply of resident, inexpensive labor in an area that was geographically remote from the established working-class districts of the city. Several clusters of identical dwellings help impart the "company town" feel of the neighborhood. The most important surviving



700 22nd Street. San Francisco Architectural Heritage photo. 2000.



1004 Tennessee Street, Pelton Cottage. Heritage photo. 2000.

cluster is a group of thirteen identical, Eastlake-style cottages on Tennessee and Minnesota Streets, whose designs were based on plans by San Francisco architect John Cotter Pelton, Jr., between 1880 and 1883.

Designation of the Dogpatch neighborhood is currently under review by the city's Landmarks Preservation Advisory Board, Planning Commission, and Board of Supervisors, but is expected to occur by early 2003.



Bayshore Cutoff Tunnel. San Francisco Historical Photograph Collection, San Francisco Public Library. No date.

Policy 1.7

Protect important examples of engineering achievements such as bridges and tunnels and, as appropriate, designate as city landmarks or as contributors to historic districts.

A number of engineering achievements exist in the Central Waterfront area, such as the Bayshore Cutoff Tunnels and associated bridges at 23rd and 25th Streets, the Third Street Islais Creek Bridge, and various manufacturing and shipbuilding cranes found throughout the area.

Policy 1.8

Promote preservation incentives that encourage reusing older buildings in the Central Waterfront area.

Preservation incentives are intended to encourage property owners to repair, restore, or rehabilitate historic resources in lieu of demolition. While San Francisco offers local preservation incentive programs, other incentives are offered through federal and state agencies. These include federal tax credits for rehabilitation of qualified historical resources, property tax abatement programs (the Mills Act), alternative building codes, and tax deductions for preservation easements. Preservation incentives can result in tangible benefits to property owners.

Policy 1.9

Encourage sustainability of cultural resources in the Central Waterfront consistent with the goals and objectives of the Sustainability Plan for the City and County of San Francisco.

San Francisco has adopted a Sustainability Plan that addresses environmental topics including energy, hazardous materials, water, human health, parks, open spaces, streetscapes, and transportation. It is the policy of San Francisco to promote

resource conservation, rehabilitation of the built environment, and adaptive use of cultural resources using an environmentally sensitive “green building standards” approach to development.

The components of green building standards include resource-efficient design principles both in rehabilitation and deconstruction projects, the appropriate selection of materials, space allocation within buildings and sites for recycling, and low-waste landscaping techniques. The salvage and reuse of construction and demolition materials that are structurally sound as part of new construction and rehabilitation projects promotes the principles of green building standards and achieves sustainability.

OBJECTIVE 2

Use care in rehabilitating older buildings to enhance rather than weaken their original character.

The character and style of older buildings of all types and degrees of merit can be needlessly hidden and diminished by misguided improvements. Architectural advice, and where necessary and feasible the assistance of public programs, should be sought to ensure that the richness of the original design and its materials and details will be restored.

Policy 2.1

In general, new buildings should be designed to respect the character of nearby older development.

More specifically, new buildings adjacent to or with the potential to visually impact historic contexts or structures should be designed to compliment the character and scale of its environs. The new and old can stand next to one another with pleasing effects, but only if there is a similarity or successful transition in scale, building form and proportion, detail, and materials.

Policy 2.2

Apply the Secretary of the Interior's Standards for the Treatment of Historic Properties for all projects that affect individually designated buildings at the local, state, or national level.

The Secretary of the Interior's Standards assist in the long-term preservation of cultural resources through the protection of historical materials and features. Nationally, they are intended to promote responsible preservation practices that help to protect against the loss of irreplaceable cultural resources.

Policy 2.3

Apply the Secretary of the Interior's Standards for the Treatment of Historic Properties for infill construction in Historic Districts and Conservation Districts (designated at the local, state, or national level) to assure compatibility with the character of districts.

The Standards should also be applied in city decisions involving infill construction within conservation or historic districts. These districts generally represent the cultural, social, economic or political history of an area, and the physical attributes of a distinct historical period. Each district's unique characteristics are described in the Planning Code. Infill construction in historic districts should be compatible with the existing setting and built environment.

Policy 2.4

Consider extending the compliance period for local, state, or nationally designated UMB (Unreinforced Masonry Buildings) found in the Central Waterfront and Pier 70 area.

In 1990, the Planning Department conducted a cultural resource survey of more than 2,000 privately owned, unreinforced masonry buildings in San Francisco. Extending the compliance period for designated UMBs, provided that public health and safety issues are addressed, will encourage property owners to not only designate these resources, but to protect them as well.

Resources included in the Planning Department's 2001
Central Waterfront Cultural Resource Survey
(NHRP = National Register of Historic Places status Code)

Number	Name/Address	NRHP	Prop. Type
1	Boat Repair/Storage, 651 Illinois St.	3B	Industrial
2	Pier 66 Boatyard Office	5S3	Industrial
3	555 Illinois St.	5S3	Industrial
4	420 17th St.	6Z1	Industrial
5	1830 Third St.	4D2	Mixed Use
6	701 16th St.	6Z1	Industrial
7	1900 Third St.	4D2	Industrial
8	2085 Third St.	4D2	Industrial
9	550 18th St.	4D2	Industrial/Commercial
10	2075 Third St.	4D2	Industrial/Commercial
11	2065 Third St.	6Z1	Commercial
12	2051 Third St.	5S3	Industrial/Commercial
13	2092 Third St.	4D2	Mixed Use
14	603 Tennessee St.	5S3	Industrial
15	670-674 Tennessee St.	5N	Residential
16	674-682 Tennessee St.	5N	Residential
17	690 Tennessee St.	5S3	Commercial
18	501-555 Minnesota St.	4D2	Industrial
19	590 Minnesota St.	5S3	Industrial
20	580-598 Indiana St.	4D2	Industrial
21	California Canneries Company Bldg., 600 Minnesota St.	3D	Industrial
22	725 18th St.	4D2	Industrial
23	695 Minnesota St.	5D1	Industrial
24	601-645 Minnesota St.	6Z1	Mixed Use
25	721 Tennessee St.	6Z1	Industrial
26	2146-8 Third St.	4D2	Commercial
27	2150-52 Third St.	4D2	Mixed Use
28	2130 Third St.	4D2	Industrial
29	2121 Third St.	4D2	Industrial
30	Bldg #101, 548 20th St.	3B	Industrial
31	Bldg #102, 460 20th St.	3B	Industrial
32	Bldg #122, SF Yard	3D	Industrial
33	Bldg #104, 420 20th St.	3B	Industrial
34	Bldg #105, SF Yard	3D	Industrial
35	Bldgs #113, 114, SF Yard	3B	Industrial

Number	Name/Address	NRHP	Prop. Type
36	Bldg #115, 116, SF Yard	3D	Industrial
37	Bldg #117, SF Yard	3D	Industrial
38	Building #21, SF Yard	3B	Industrial
39	Bldg #111, 46, SF Yard	3D	Industrial
40	Bldg #38, SF Yard	3D	Industrial
41	Bldgs #109, #52, SF Yard	3D	Industrial
42	Bldg #108, SF Yard	3D	Industrial
43	Bldg #119, SF Yard	3D	Industrial
44	Bldg #110, SF Yard	3D	Industrial
45	Bldg #103, SF Yard	3D	Industrial
46	Bldg #107, SF Yard	4D5	Industrial
47	Bldg #40, SF Yard	3D	Industrial
48	Bldg #2, SF Yard	3D	Industrial
49	Bldg #11, SF Yard	3D	Industrial
50	Bldg #6, SF Yard	3D	Industrial
51	Bldg #12, SF Yard	3D	Industrial
52	Bldg #36, SF Yard	3D	Industrial
53	Bldg #19, SF Yard	3D	Industrial
54	Bldg #14, SF Yard	3D	Industrial
55	Bldg #120, SF Yard	3D	Industrial
56	Bldg #50, SF Yard	3D	Industrial
57	Bldg #30, SF Yard	4D5	Industrial
58	Bldg #121, SF Yard	3D	Industrial
59	Bldg #30, SF Yard	4D5	Industrial
60	Bldg #66, SF Yard	4D5	Industrial
61	Bldg #16, SF Yard	3D	Industrial
62	Bldg #30, SF Yard	3D	Industrial
63	Bldg #25, SF Yard	3D	Industrial
64	Bldg #15, SF Yard	3D	Industrial
65	Bldg #2, SF Yard	3D	Industrial
66	Bldg #29, SF Yard	4D5	Industrial
67	Bldg #24, SF Yard	6Z1	Industrial
68	Fire Station, SF Yard	6Z1	Industrial
69	Bldg #64, SF Yard	4D5	Industrial
70	Crane Support, SF Yard	6Z1	Industrial
71	Slip #4 & Cranes, Pier 70, SF Yard	4D2	Industrial
72	Pier 68 (Piers), SF Yard	4D5-7	Industrial
73	Pier 68 (Slips), SF Yard	6Z1	Industrial

Number	Name/Address	NRHP	Prop. Type
74	Pier 70 (Piers), SF Yard	6Z1-7	Industrial
75	Pier 70 (Slips), SF Yard	6Z1	Industrial
76	Bldg #123, SF Yard	3D	Industrial
77	2289-2295 Third St.	4D2	Mixed Use
78	2201-2203 Third St.	4D2	Industrial
79	2225 Third St.	4D2	Industrial
80	2255 Third St.	4D2	Industrial
81	2290 Third St.	4D2	Commercial
82	815-825 Tennessee St.	4D2	Industrial
83	2230 Third St.	5S3	Commercial
84	724-728 20th St.	6Z1	Commercial
85	800 Indiana St.	5S3	Industrial
86	2350 Third St.	4D2	Commercial
87	2342-2344 Third St.	4D2	Residential
88	2368 Third St.	5N	Mixed Use
89	2476-2478 Third St.	4D2	Residential
90	2420 Third St.	4D2	Commercial
91	2440 Third St.	4D2	Industrial
92	2430 Third St.	6Z1	Industrial
93	2472 Third St.	6Z1	Industrial
94	2400 Third St.	4D2	Commercial
95	2360-2364 Third St.	4D2	Commercial
96	American Can Company 2301 Third St.	3B	Industrial
97	2518-2520 Third St.	3D	Mixed Use
98	2524-2526 Third St.	5N	Mixed Use
99	2530 Third St.	5S3	Commercial
100	2542-2544 Third St.	5S3	Mixed Use
101	2604-2608 Third St.	6Z1	Commercial
102	2620 Third St.	4D2	Industrial
103	2624-2626 Third St.	4D2	Commercial
104	2628-2632 Third St.	4D2	Mixed Use
105	2636-2638 Third St.	3B	Residential
106	2642-2646 Third St.	6Z1	Residential
107	American Can Company Southern Ext. 2501 Third St.	4S1	Industrial
108	1270 Indiana St.	5N	Industrial

Number	Name/Address	NRHP	Prop. Type
109	1280 Minnesota St.	6Z1	Industrial
110	1201 Minnesota St.	6Z1	Industrial
111	1225 Minnesota St.	6Z1	Industrial
112	1237 Minnesota St.	5N	Industrial
113	1275 Minnesota St.	4D2	Industrial
114	1300 Illinois St.	4D2	Industrial
115	1215-1275 Michigan St.	6Z1	Industrial
116	W.C. Thompson Garage, Wash Rack, & Loading Dock, 1485 Illinois St.	5N	Industrial
117	W.C. Thompson Bldgs, 1401 Illinois St.	5N	Industrial
118	2833 Third St.	6Z1	Industrial/Commercial
119	Eisele & Dondeno Marble Mill, 2895 Third St.	5N	Industrial
120	George R. Nelson Lumber Company, 2800 Third St.	5N	Industrial
121	1000 25th St.	4D2	Industrial
122	West Coast Fast Freight, 2955 Third St.	6Z1	Commercial
123	800 Cesar Chavez St.	6Z1	Industrial
124	3003-3095 Third St.	4D2	Industrial
125	1100 Cesar Chavez St.	5S3	Industrial
126	1301 Cesar Chavez St.	6Z1	Industrial
127	1300 Cesar Chavez St.	6Z1	Industrial
128	3150 Third St.	6Z1	Industrial
129	900 Marin St.	6Z1	Industrial
130	Cobbledick-Kibbe Glass Co. Warehouse & Office, 888 Marin St.	6Z1	Industrial
131	3201 Third St.	4S1	Industrial
132	3240 Third St.	4D2	Industrial
133	Pier 84 and Copra crane	4S1	Industrial
134	20th & Illinois St. paving	4D5	Infrastructure
135	23 rd St. Bridge	3D	Infrastructure
136	22 nd St. Bridge	3D	Infrastructure
137	Bayshore Cut-Off Tunnels No.1&2	3D	Infrastructure
138	Third Street Lights	4D5	Infrastructure
139	Irish Hill	3D	Other

National Register Status Codes:

3B -- Appears eligible for listing in the National Register of Historic Places. The property contributes to a historic district that has been fully documented according to the California Office of Historic Preservation. The resource also appears eligible for separate listing in the National Register.

3D -- Appears eligible for listing in the National Register of Historic Places. The property contributes to a historic district that has been fully documented according to the California Office of Historic Preservation. The resource also appears eligible for district listing in the National Register.

4D2 -- May become eligible for listing in the National Register of Historic Places. This property is a contributor to a fully documented historic district that may become eligible for listing in the National Register when more historical or architectural research is performed on the district.

4S1 -- May become eligible for listing in the National Register of Historic Places. May become eligible for separate listing in the National Register when the property becomes old enough to meet the Register's 50-year requirement.

5D1 -- Ineligible for the National Register but of local interest. This property is a contributor to a fully documented district that is designated or eligible for designation as a local historic district.

5N -- Ineligible for the National Register but of local interest. This property has experienced significant changes but should be given consideration in local planning.

5S3 -- Ineligible for the National Register but of local interest. This property is not eligible for separate listing in the National Register or designation under local ordinances but is eligible for special consideration in local planning.

6Z1 -- Not of local interest or potentially eligible for the National Register. This property appears not to have particular cultural or historical value.

7 -- Not rated.

4

Moving About

- i. **The System of Public Ways**
- ii. **Access and Mobility**
- iii. **Parking**

OBJECTIVE 1

Improve public connections within and to the neighborhood.

OBJECTIVE 2

Design streets that reflect their role as an important part of civic space and for multiple users and means of travel.

OBJECTIVE 3

Knit access to public transportation into the fabric of the neighborhood by ensuring that new and existing rail transit services are used to their full potential and by strengthening other transit connections to the Central Waterfront.

OBJECTIVE 4

Promote travel by bicycle by providing a safe, convenient, and attractive network of routes.

OBJECTIVE 5

Support the transportation needs of the PDR and maritime uses in the area.

OBJECTIVE 6

Assess the performance of the street system by measuring the overall movement of people and goods rather than just the movement of vehicles.

OBJECTIVE 7

Manage off-street parking to encourage new housing development and support local businesses while recognizing the limited capacity of the street network to carry more automobiles.

OBJECTIVE 8

Manage public parking as a limited resource based on a system of explicit priorities tied to relative user needs.



View looking north on Third Street.

The gritty, industrial character of the Central Waterfront extends to the transportation system serving it. Spartan is the overriding sensation for all those traveling to, from, or through the neighborhood. At transit stops, there is little protection from either the elements or from the dust thrown up by passing trucks. At the Caltrain station, shelter is provided by the brutalist freeway overpass far overhead, and an open drainage ditch runs down the side of the platform. Pedestrian and bicycle facilities are notably absent, giving those on foot or bike the impression that they are in some way unwelcome visitors to the neighborhood. In contrast to other parts of the city, there is little in the way of parking management.

The challenge is to preserve the essential character of the neighborhood while supporting a full, equitable range of choices for the movement of people and goods to, within, and from the Central Waterfront. Access to transportation, particularly alternatives to the private automobile, must be knitted into the fabric of the neighborhood, and everyday services promoted to reduce the need to travel.

The transportation system must move beyond the spartan, and take advantage of the tremendous opportunities, as well as challenges, that new development will bring. The Third Street light rail line will dramatically improve perceptions of the accessibility of the area by transit. New commercial and residential development will give greater potential to support basic services, reduce the need to travel outside the neighborhood, and at the same time provide a street presence that makes for a more attractive environment for pedestrians, bicyclists and those waiting for transit. At the same time, the transportation system must continue to cater to industrial uses, through addressing the conflicts that heavy freight traffic in particular creates with other road users.

This section is divided into three sub-sections – System of Public Ways, Access and Mobility, and Parking. The first deals with the physical construct of the street network and the design and character of the street space, emphasizing streets as pedestrian-oriented civic space and integral components of the public open space system. The second sub-section, Access and Mobility, addresses various modes of moving about the Central Waterfront, including transit, bicycles, and trucks. A detailed program of proposed street improvements in the plan area follows this sub-section. The section concludes with a discussion of parking management, both on- and off-street parking for all uses in the neighborhood.

i. System of Public Ways

OBJECTIVE 1

Improve public connections within and to the neighborhood.

One of the key design goals of this plan is to augment and enrich the public street and pathway system. One way is to extend the street grid pattern to break up large parcels into human-scaled city-scale blocks, facilitating greater access to all areas of the neighborhood. In areas where the street cannot be extended due to topography, preservation of historical features, or other factors, the “line of the grid” should be extended through building placement and, if possible, pathways to ensure the continuation of sight lines and pedestrian access. In the plan area, the grid is also a key tool to reconnect the area’s open spaces, waterfront, retail areas, and transit services with one another and to create a walkable place. The grid allows flexibility for development while providing a framework for an improved pedestrian experience by creating shorter, walkable blocks with more direct travel routes, rather than superblocks that become obstacles to pedestrians and cyclists. Connections need not be made just with full-access streets, but can also be made with pedestrian-only pathways and linear parks that cut through long blocks to break down their scale.

Policy 1.1

Extend and rebuild the street grid, especially in the direction of the Bay.

The Bay is an incredible natural asset, yet the Central Waterfront now has little access to the waterfront because of large parcelization and Port and industrial uses that do not allow many streets to penetrate through to or follow the water’s edge. Extending east-west streets to the water’s edge to facilitate public access and siting new structures so as not to obstruct public views down rights-of-way to the water’s edge is encouraged as large properties and Port lands redevelop. Where historic structures would block the straight extension of rights-of-way (such as 20th and 22nd Streets), roads or paths should bend around the structures, though public pedestrian access through the structures should be explored. Not all extensions of the street grid need to accommodate motorized traffic; however they should allow pedestrian and bicycle access.

Policy 1.2

Connect Potrero Hill to San Francisco Bay through physical linkages.

The combination of topography and physical barriers, especially the I-280 freeway, disconnects Potrero Hill from the Bay. Eighteenth Street, the primary route to the Central Waterfront from Potrero Hill, ends at Illinois Street, and 20th Street, which goes through the heart of the Port's Pier 70 Opportunity Site, peters out in an area of industrial and dis-used land before it reaches the water. Extending the street grid and improving existing right-of-ways will make the bay more accessible to residents of Potrero Hill and the Central Waterfront.

Policy 1.3

Reclaim public rights-of-way that have been vacated or incorporated into private parcels.

The Central Waterfront contains a number of public right-of-ways that have, over the years, been abandoned or allowed to be incorporated into private parcels. These are more appropriately used to support the public realm, either as open space or as part of the system of public ways. Recovering these right-of-ways is especially important in the Central Waterfront because of the dearth of public space.

Based on these policies, the following street extensions and connections should be made as large properties or Port lands develop:

- Provide public access to the waterfront from the current terminus of Mariposa Street at Illinois Street.
- Extend 18th Street east as a pedestrian/bicycle path past its current terminus at Illinois Street (east of which 18th Street was "closed" on paper in 1919) to physically link Potrero Hill, the Central Waterfront, and the Pier 70 Opportunity Site, especially open space at Pier 70. (Port)
- Allow bicycle and pedestrian circulation east of Illinois Street from 18th to 20th Streets to facilitate movement through the Pier 70 Opportunity Site. Consider connecting 18th, 19th, and 20th Streets east of Illinois Street for auto circulation to avoid excessive dead-ends into the Pier 70 Opportunity Site. (Port)

- Provide access on all sides of Irish Hill (lot 4120/002, currently owned by Pacific Gas and Electric) and to the adjacent unimproved Michigan Street right-of-way by improving existing right-of-ways and constructing new perimeter access routes where necessary. A new right-of-way should connect Illinois Street to Michigan Street approximately midway between 20th and 22nd Streets (through lot 4110/001, Port property) to facilitate vehicular access to Irish Hill, the adjacent historic Iron Works buildings, and the Pier 70 Opportunity Site. Michigan Street, currently an unimproved city right-of-way between 20th and 22nd Streets, should be improved in coordination with the Port south from 20th Street up to the portion adjacent to the proposed Irish Hill open space. Access along the eastern edge of Irish Hill should be opened on Port property (lot 4052/001, former Union Iron Works).
- Extend 22nd Street to the Bay (through Port property, lot 4052/001). Twenty-second Street is a primary east-west connector that can provide access to Irish Hill and into the Maritime Industrial District. The Street might have to wind around historic buildings that have been constructed in the right-of-way, which still exists on paper, but which was closed in 1940.
- Extend 23rd and 25th Streets rights-of-way to the Bay. The extension of 23rd Street would extend through lots 4232/001 and 006, currently part of the power plant site. Twenty-fifth Street is an unimproved right-of-way under Port jurisdiction.
- Improve Michigan and Maryland Streets between 24th and 25th Streets. These two streets are currently unimproved paper streets on land under Port jurisdiction. This will serve to connect Potrero Hill to development along 24th Street and Warm Water Cove.
- Provide public pedestrian, bicycle, and possibly auto access along the right-of-way at Maryland Street, between 24th and 25th Streets. This will effectively link Potrero Hill to Warm Water Cove via 25th Street, and allow continuous access along the waterfront. (Port)
- Extend Marin Street, or at least a pedestrian passage, through lots 4355/006 and 4378/006 (same property owner) to connect Tennessee and Third Streets. This would complete Marin Street from Indiana Street to Pier 80, and provide another connection between Pier 80, the light rail stop at Marin Street, and public space at Islais Creek.
- Improve and remove obstructing private encroachments from Minnesota Street between 25th and 26th Streets.



OBJECTIVE 2

Design streets that reflect their role as an important part of civic space that serve multiple users and means of travel.

Policy 2.1

Treat streets as an important part of the public open space system.

Streets are the city's most important and ubiquitous civic open space. They are not only utilitarian movement corridors; they are also are our public realm—the primary place for people to meet and socialize, stroll, contemplate vistas, peer in storefronts, and absorb the diversity that the city has to offer around each corner. These great expanses of public space, streets, are available outside every doorway, accessible to each and every resident. We have a right to expect streets to uplift our neighborhoods and provide space to move in a myriad of ways and tempos. Given how much they dominate our cityscape, streets should be more than means of getting from A to B, but should be places worth spending time in and of themselves.

Policy 2.2

Design streets for a variety of users.

People in a city use streets in different ways. Streets must be able to efficiently and safely accommodate pedestrians, bicyclists, and transit vehicles as well as automobiles; streets must be multi-modal corridors that meet our needs to move large volumes of people at different paces and by different means. Streets that emphasize car movement over other types may in fact slow down the trips of many people. For instance, a single bus delayed in traffic may carry more than 50 people, as compared with an average of not much more than one person per car. Streets must emphasize people movement above all else.

Policy 2.3

Ensure provisions for safe and enjoyable pedestrian travel throughout the neighborhood by employing innovative street design.

The design of great multi-use streets that provide a pleasant and safe pedestrian environment, in addition to accommodating other means of movement, must incorporate many essential ingredients. Refer to the Fundamental Principles for Street Design (see sidebar).

FUNDAMENTAL PRINCIPLES FOR STREET DESIGN

1. Provide Inviting and Comfortable Sidewalks

Streets with inviting and comfortable sidewalks make for livable and vibrant neighborhoods by providing common space for people to meet and interact face-to-face or to linger alone, watching the action on the street. The character of sidewalks should be inviting; they should provide trees for shade and sense of enclosure, benches and stoops for rest, art for amusement, and adjacent windows and doors that spill out with interesting activity. Sidewalks in commercial areas should be lined with active storefront uses such as shops and cafes, while sidewalks in predominantly residential neighborhoods should be fronted with entries and landscaped areas. Blank, monotonous walls along sidewalk edges should be avoided. Safe, comfortable and attractive waiting areas should be provided for streetcar and bus stops, without restricting pedestrian traffic flow on sidewalks. On busy streets it is especially important to provide an ample buffer for pedestrians from moving traffic.

Ample Width: Sidewalks must be wide enough to accommodate the number of pedestrians who use them daily, and be free of obstructions such as utility boxes and poles. Major pedestrian streets should maintain a minimum width of 10 feet, including a minimum 6-foot wide “clear zone” for pedestrian traffic free of trees, benches, or other furniture. In commercial districts sidewalks must be able to comfortably accommodate a high volume of foot traffic. Though sidewalks do not need to be extremely wide, they should be wide enough to allow pedestrians to feel safely buffered from traffic and to provide at least some space for outdoor seating and merchandise display.

Street Trees: Closely spaced and sizeable trees planted parallel and close to the curb, progressing along the street up to the intersection, create a visual and psychological buffer between the pedestrian space of the sidewalk and vehicular traffic. More than any other

single element, healthy street trees can humanize a street, even a major traffic street. A natural canopy overhead will frame the pedestrian view into the active uses that line the sidewalk, away from the traffic. Trees also improve air quality and provide shade. Street trees should be regularly spaced. For all streets on which continuous tree plantings are either impractical or undesirable, tree clusters are recommended. Tree clusters are also an effective means of highlighting corner sidewalk widening. New plantings should strive to match the predominate species in areas of existing planting for consistency of pedestrian street experience. New 15-gallon street trees should be at least 7 feet tall and have at least a 2-inch trunk caliper at approximately four feet above grade.

The MUNI Third Street plan calls for planting new trees at 20' on center as part of a redesign for Third Street to accommodate the MUNI light rail line. To buffer pedestrians from closely abutting vehicular traffic where sidewalks narrow to 9 feet at rail stops (and curb parking disappears), trees should be planted more closely - at 10' on center - extending to east-west cross streets. This would supplement the planting that will occur as part of the 3rd Street Light Rail Project. The Planning Code requirement to plant street trees with new construction or significant alterations should not apply for properties south of 25th Street on industrial streets where new sidewalks are not recommended (see industrial street policies 5.1-5.6). On these streets the placement of fixtures such as trees could interfere with the industrial flexibility of the streets.

Curb-side Parking: Like street trees, curb-side parking provides a physical and psychological buffer for pedestrians, and helps to separate sidewalk activity from moving traffic. Curb parking also provides important short-term drop-off, loading, and parking space for shopping trips and other commercial needs. Importantly, curb parking calms traffic by reducing the perceived width of the street. Maximizing curb space for parking is far more preferable to allowing the proliferation of curb cuts for off-street parking. Off-

street parking degrades the pedestrian realm by allowing cars to cross sidewalks, encouraging the presence of inactive garage doors, and causing the loss of street trees and other sidewalk amenities.

Curb Cuts: There should be a minimum of interference caused by auto traffic crossing the sidewalk to access off-street parking. Driveways between intersections detract from the pedestrian environment, introduced cars across busy sidewalks, and make progress more difficult for the elderly and mobility-impaired. Entrances to garages and parking lots should always be located on side streets and not on main streets with high volumes of pedestrian traffic or transit vehicles. (See the Urban Design Guidelines for specific locations for restrictions on curb cuts).



Mid-block sidewalk bulb-outs, such as this existing one on Noe Street, provide valuable neighborhood public space.

Pedestrian-scaled lighting: In order to create a more inviting walking environment, reduce the hazards of traffic at night, provide security from crime and other perceived dangers, public areas should have adequate lighting. Although the need for lighting is general, special attention should be given to crosswalks and to pathways in parks and around public buildings. Standard street lighting floods streets with too much light and creates too much glare while poorly illuminating sidewalks. Smaller human-scaled lighting fixtures should be used along sidewalks and open spaces. Care should be taken to shield the glare of any lighting from residential properties, as well as to use techniques that carefully direct their light in order to avoid excessive light pollution of the night sky. Pedestrian lighting was not proposed and will not be implemented on Third Street by MUNI as part of the light rail project. Funding should be sought to install lighting mid-way between strain poles on blocks with station platforms as described in this plan. Lighting patterns for the following specific streets should follow design standards as set out in the Urban Design Element of the San Francisco General Plan: Cesar Chavez and Illinois Streets are to be lit as major through-streets; Mariposa Street is to be lit as a Collector Street, and all other streets of the Central Waterfront are to be lit as local streets.

Places to sit: Streets are important components of the public open space system. Providing places to sit, rest, and linger is critical to creating public places where people can gather, creating nodes of activity. In turn, such activity makes streets interesting and enjoyable places for pedestrians. Public benches are strongly encouraged in the public right-of-way, space permitting. Sidewalk bulbouts create larger areas that can accommodate benches (possibly placed perpendicular to the sidewalk) and tables or other amenities. Such spaces become small gathering nodes and “eddies” in the movement of the street. In retail areas and on high pedestrian traffic ways, building owners and developers are especially invited to explore building-edge sitting spaces such as ledges, steps, and window seats.

Public benches should be added at all parks and on east-west streets between Third and Tennessee Streets.

2. Design Safe Pedestrian Crossings

The high speed and significant volume of traffic, combined with poorly marked or unisgnalized crossings, make traversing some streets in the plan area uncomfortable, if not unsafe. Wide streets with unmarked pedestrian crossings force people to walk long distances where motorists are not reminded to look for them. Several methods should be employed to improve pedestrian crossings on major streets, particularly near transit stops.

Widened sidewalks at intersections: Widened sidewalks at corners, also called “bulb-outs,” serve many functions: 1) they enhance pedestrian safety by shortening the distance needed to cross the street and making pedestrians more visible to oncoming traffic; 2) they create more generous space for pedestrians queuing to cross the street; 3) they provide pockets of neighborhood space for gathering or sitting; 4) they provide more space for public realm amenities, such as trees and landscaping; and 5) they enlarge corners (i.e. reduce corner radii), thereby slowing turning vehicles.

Mid-block bulbouts: Mid-block bulbouts are also important techniques for creating pedestrian crossings on very long blocks and for creating more intimate pockets of neighborhood space on residential streets (especially if alternated with diagonal or perpendicular parking). Any mid-block crossings on 3rd Street would have to include pedestrian signalization that would only allow crossing when MUNI trains are at a safe distance, in much the same way as has been implemented for The Embarcadero.

Boldly marked crosswalks should be also introduced to further alert drivers that they are in a pedestrian zone.

Bulbing sidewalks and augmented pedestrian spaces along east-west streets in the Central Waterfront would improve pedestrian accessibility to neighborhood-serving commercial uses off of Third Street and enhance the retail environment in intensive pedestrian areas near light-rail stops.

3. Engineer streets for safe driving and pedestrian comfort

Drivers take cues more than anything else from the physical design of streets. If corners and curves are designed with very wide sweeping turns, then drivers will take them at higher speeds, regardless of what signs may advise. Many of our city streets are “overdesigned” for highway-like speeds, both in the design of corners and in the width of travel lanes. Streets should be designed with tight corners so that drivers must slow at intersections and when turning, greatly increasing pedestrian safety.

Space on city streets is limited and often more space than necessary is allocated for automobile travel lanes, resulting in sidewalks that are too narrow or the elimination of space for bike lanes. Wide travel lanes encourage speeding and other unsafe driving behavior, creating street environments that are not pedestrian or neighborhood friendly. The width of travel lanes should be minimized to the narrowest necessary to accommodate the expected type of traffic. Travel lanes for cars need only be 10 feet wide (or even less on slow streets and alleys), unless buses or heavy trucking are regularly expected on the street, in which case lane width of 11 to 12 feet wide is acceptable. Parking lanes can be 7.5 or 8 feet wide.

4. Provide Wayfinding Signage

As people visit and walk around the Central Waterfront, the locations of notable destinations are not always apparent. A system of wayfinding signage, especially at a pedestrian scale, would help to orient travelers. Implementation should be coordinated with the City Wayfinding plan. The signage system should incorporate directions to the following important destinations:

- Caltrain station
- MUNI Third Street light rail stops
- Bay Trail
- Water access points
- Pier 70 park
- Warm Water Cove
- Irish Hill
- Esprit Park



5. Street Furniture

The term “street furniture” describes all of the pedestrian-oriented amenities and physical objects placed in the street right-of-way to enhance the public realm and character of the streets.

A clear pedestrian zone of no less than six feet in width must be preserved on the sidewalk at all times for pedestrian passage. In general, street furniture should be installed on the curb side of the clear pedestrian zone unless otherwise noted. Placement of street furniture should conform to standards established in *Destination Downtown: Streetscape Investments for a Walkable City* (adopted July 13, 1995).

In addition to the above-mentioned critical elements (benches, lighting, planters, and signage), important street furniture includes:

Bollards

Bollards are recommended in locations without trees or other street furniture to protect pedestrians from vehicles and to keep cars from parking on sidewalks and damaging sidewalk structures or elements.

Newsracks

In areas of high pedestrian traffic, pedestal newsracks are strongly encouraged to prevent clutter and pedestrian congestion.

Bicycle Racks

Parking meters and street signs often double as bicycle racks, but many sidewalks lack these elements or have been retrofitted to make them unusable for this purpose. Conveniently placed bicycle racks are important to facilitating bike travel. Where sidewalk width does not permit them, bike racks can be creatively placed in the street itself, in lieu of on-street parking spots, with adequate protection of bollards from vehicles. (See *Typical Third Street Urban Design Treatments* illustration for example)

Policy 2.4

Support pedestrians by encouraging the development of an active streetfront.

Creating a pleasant and safe pedestrian environment relies on more than the design of the right-of-way itself. The function of a street and the human experience of it are formed by an interactive dialogue between the street and the structures that frame it. Ensuring active ground-floor uses and fine-grained and detailed facades are critical to creating an attractive pedestrian realm. The policies and guidelines in this plan reflect these interactions between the built environment and the desire for an enriching pedestrian realm.

Policy 2.5

Clearly mark the Bay Trail where it passes through the Central Waterfront and move it closer to the Bay as opportunities become available.

The Bay Trail is a planned recreational corridor that, when complete, will encircle San Francisco and San Pablo Bays with a continuous 400-mile network of bicycling and hiking trails. To date, approximately 210 miles of the alignment—or slightly more than half the Bay Trail's ultimate length—has been completed. At present Third Street and Illinois Street provide the link in the Bay Trail through the Central Waterfront. Currently, the Bay Trail crosses Islais Creek on Third Street and jogs over to Illinois Street at 23rd Street. Ideally, the trail would run closer to the water, though heavy industrial and maritime uses, along with a lack of continuous public right-of-ways, preclude such a continuous shoreline path. The city should take advantage of opportunities to move it eastwards if and when Port lands are redeveloped. Signs for spur trails to new and improved public open spaces and shoreline access at Islais Creek, Warm Water Cove, Irish Hill, and Pier 70 should be placed and included in the Bay Trail maps and literature.



The Bay Trail, as it passes through the Central Waterfront.

Policy 2.6

Encourage CalTrans to improve the 18th and 20th Street bridges over I-280 for better pedestrian access between the Potrero Hill neighborhood and the Central Waterfront.

Buffering pedestrians from traffic and adding pedestrian-scaled elements would improve pedestrian comfort. On both bridges make the following improvements:

Pedestrian-scaled street lighting

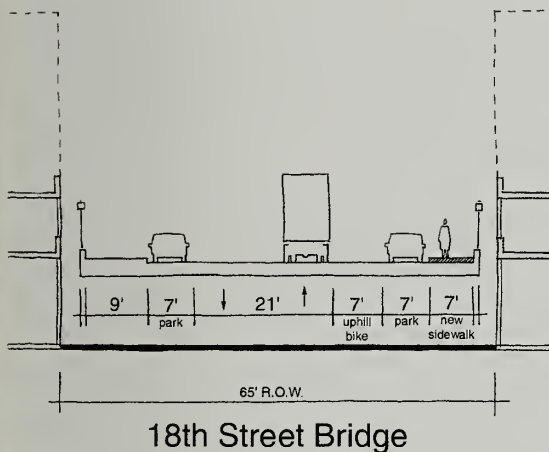
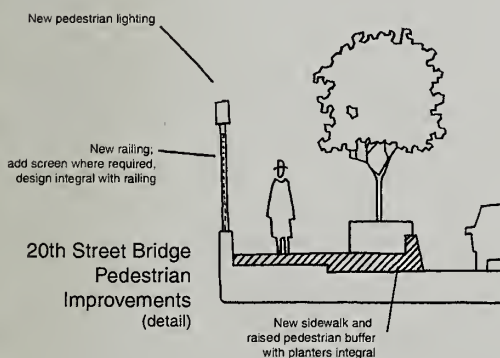
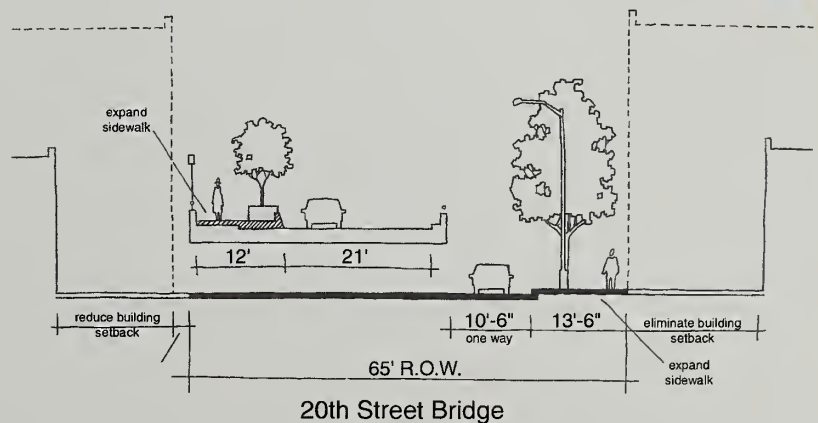
- Pedestrian crossing signals at both ends of the bridge to allow safe road crossing
- Bulb-outs at the ends of parking lanes for increased pedestrian space, with benches
- New integrally designed railing and fence

On 18th Street:

- New sidewalk on the north side
- Eliminate one traffic lane each direction and replace with parallel parking
- Add uphill bike lane

On 20th Street:

- Expanded sidewalks on the bridge and at ground level (north side) for pedestrian comfort
- Raised concrete buffer between sidewalk and traffic that incorporates planting boxes with street trees and irrigation

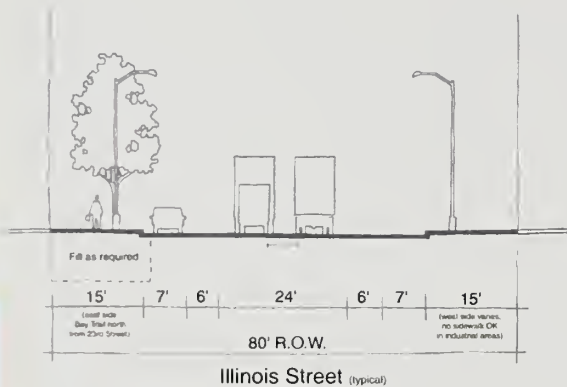
**18th Street Bridge****20th Street Bridge
Pedestrian
Improvements
(detail)****20th Street Bridge**

Policy 2.7

Encourage pedestrian activity by creating a better physical environment for walking.

Make the following improvements in the Central Waterfront:

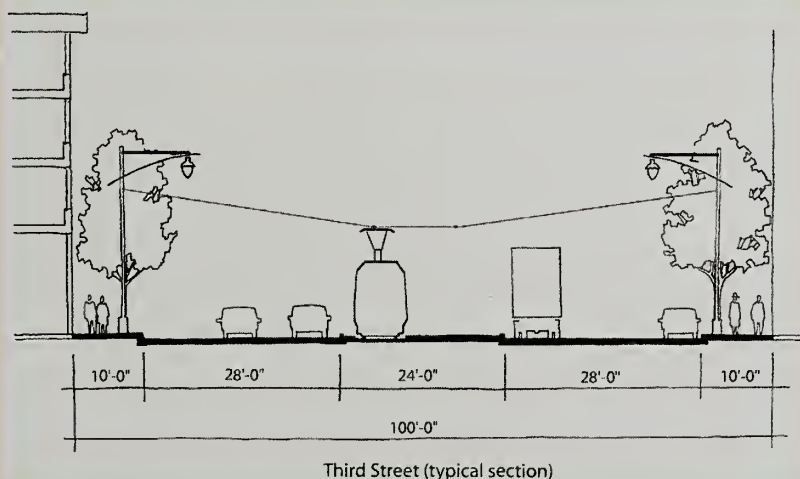
1. Expand the sidewalk (i.e. build bulb-outs) on 20th, 23rd, and Marin Streets at their intersections with Third Street to enhance pedestrian space and safety near transit stops.
2. Construct corner and midblock bulbouts on Tennessee and Minnesota Streets to create neighborhood gathering space, along with converting parallel to diagonal or perpendicular parking along Tennessee and Minnesota Streets.
3. Widen sidewalks and add bulbouts and other amenities on 22nd Street between Indiana and Third Streets to improve the pedestrian environment in the retail heart of the neighborhood.
4. Improve the sidewalks along Illinois Street (including adding a sidewalk on the west side between 19th and 20th Streets). Add bicycle lanes. If possible, provide space for pedestrians and cyclists on the proposed Illinois Street Bridge. Encourage property owners of heavy industrial uses to create a buffer comprised of plantings, walls, and fences to the sidewalk on the east side of Illinois Street.
5. Create a greenway along 24th Street that will connect Warm Water Cove to the rest of the neighborhood. This will offer the opportunity to connect the park more strongly to Third Street, making the park appear closer, and attracting more users from Third Street. (The right-of-way between the water and Michigan Street is wider than typical 65' street widths, at 100'.) This width allows for a better use of the public space for pedestrians.
6. Provide sidewalks and pedestrian amenities on streets extended onto Port lands.
7. Provide signage to mark the Bay Trail on Third and Illinois Streets and other streets where it passes through the neighborhood, moving the trail eastward as Port lands are redeveloped and the street grid is extended.
8. Enhance the pedestrian environment on Third Street (see sidebar for strategies for this major street).



Enhancing the Pedestrian Environment on Third Street

There is little disagreement that currently Third Street provides little interest or amenities for pedestrians. Its character is overwhelmed by the dominating volume of swift automobile traffic. The completion of the Third Street Light Rail, which will bisect the Central Waterfront, will usher in a new emphasis on pedestrian activity and the need for a more pedestrian-friendly environment. However the push to maintain two free-flowing lanes of auto traffic in the re-design of Third Street will result in less-than-ideal pedestrian conditions. On blocks adjacent to light rail platforms at Mariposa, 20th, 23rd, and Marin Streets, where an enhanced pedestrian environment is most critical, sidewalks are being narrowed on one or both sides of the street to as little as nine feet. In these same locations, curb parking, which creates a valuable physical and psychological buffer between pedestrians and moving traffic, is being eliminated. To enhance the pedestrian environment along Third Street, the following streetscape improvements and urban design standards are proposed:

- Expand the sidewalk (i.e. build “bulb-outs”) on Mariposa, 20th, 23rd, and Marin Streets at the intersection with Third Street to provide more pedestrian space and shorten crossing distances. On the bulb-outs plant double rows of trees, and install pedestrian-scaled lighting, seating, newsracks, bicycle racks, and other sidewalk amenities. These wide bulb-outs near the transit stations can also be enhanced with decorative paving and public art installments (coordinated thematically with the Muni platform’s artistic enhancements, notably the canopy roof and marquee pole, at 20th Street). Raised crosswalks with textured and/or colored surfaces at these east-west cross-streets would also help slow auto traffic and assert the pedestrian presence in the public realm.
- Along segments of Third Street without curb parking and where the sidewalk narrows, add streetscape elements to enhance the buffer between pedestrians and traffic. Additionally, any landscaping (i.e. street trees) or street furniture that reduce the perceived width of Third Street, thereby slowing traffic, should be put in place.



As part of the light rail implementation, Muni will locate strain poles (which hold the overhead wires for the rail, as well as street lights, signals, and signage) approximately every 100' and will plant street trees approximately 20' on center. To augment these features, pedestrian-scaled light fixtures should be located mid-way between strain poles and additional trees should be planted to establish an overall tree spacing in these segments to 10' on center. The increased frequency of these elements will visually coordinate with the change in rhythm of alternating red and black bands of trackway paving, from wider "whole time" typical paving to faster "triple time" paving approaching and along-side platforms.

New and infill trees on Third Street should be *Tristania conferta* ("Brisbane Box"), as per the Muni Third Street Light Rail Urban Design Plan which states that while Dogpatch has been identified as a "town center," it is not recommended to plant a unique identity tree in this area because of the large number of pre-existing healthy *Tristania conferta*.

Further, the introduction of a strip of textured paving on the outside of the curb lane (nearest the sidewalk) would make drivers aware of their proximity to sidewalks and encourage slower speeds in the curb lane. Sidewalk paving along Third Street itself should be as established in the Downtown Streetscape Plan: three-foot scored, dark grey, carbon black-based tinted concrete, finished with silicon carbide sparkle grain.

- Eliminate all currently unused curb cuts on Third Street, and prohibit new curb cuts for through-block and corner parcels with alternative street frontages. (see Urban Design Guidelines)
- To enhance pedestrian space on Third Street near transit stops where sidewalk widths are reduced and curb parking is absent, require new development on Third Street to set back the ground floor five feet from the Third Street property line, from Mariposa to 18th Street, from 19th Street to mid-way between 20th and 22nd Streets, Tubbs to 23rd Streets, 23rd to 24th Streets, and Cesar Chavez Street to Islais Creek (refer

to the map in the Urban Design Guidelines). This setback space must be free of columns or other significant pedestrian obstructions and should be treated as an extension of the sidewalk (3-foot scoring as described above) and allow public pedestrian passage. As a general policy, setbacks should be sought for all parcels along these stretches.

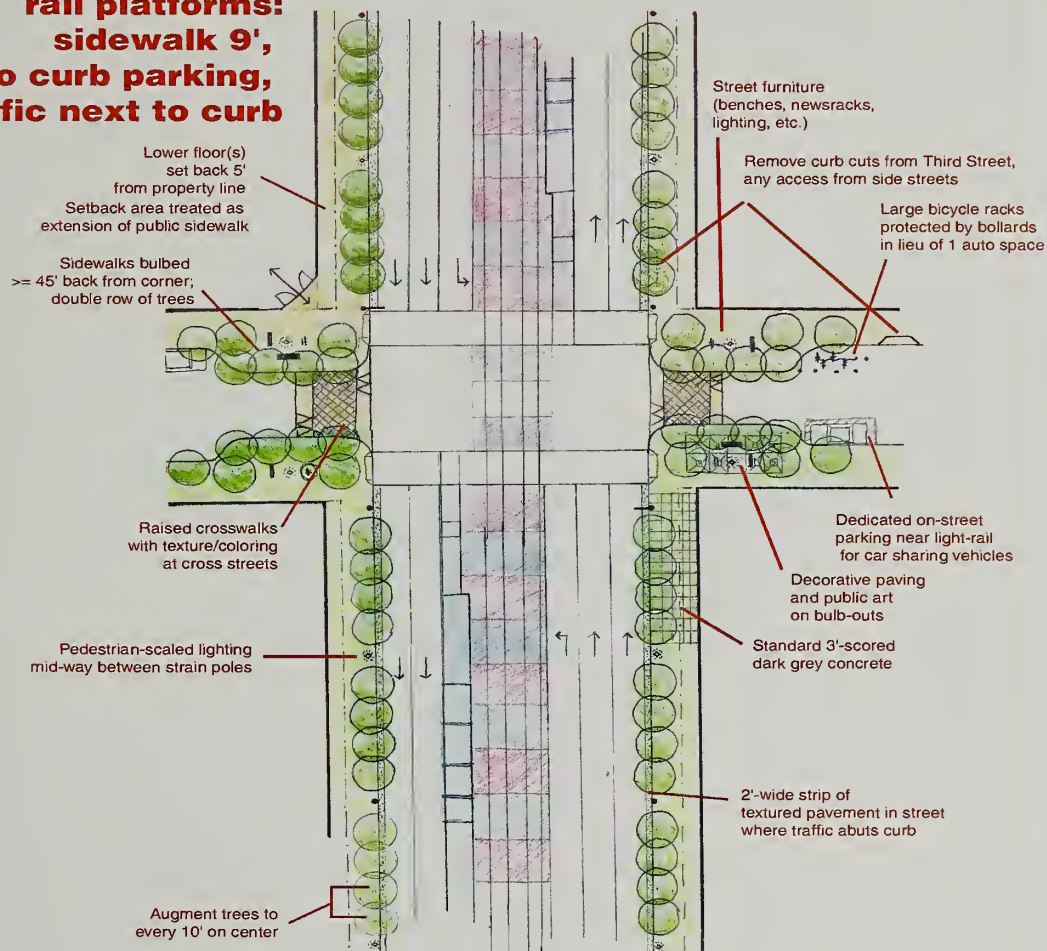
Some people have suggested legislating that all new buildings on Third Street be required to set back from their property lines by several feet in order to create more pedestrian space. A large number of existing buildings, representing a significant proportion of Third Street frontage, are unlikely to be redeveloped in the foreseeable future (e.g. buildings with current residential uses, significant PDR buildings, historic structures). Therefore, the requirement for a uniform setback would result in a random "sawtooth" pattern of building façade setbacks. This pattern is not practical, safe, economic, or aesthetically pleasing, and seems not to be the salvation for pedestrians on Third Street. To avoid the creation of a jagged street wall, in general non-corner parcels must set back, and should only set back, provided that all adjacent buildings on the subject block face from one corner up to the subject parcel have already been set back accordingly. Additional details are included in the Urban Design Guidelines.

More subtle urban design strategies can be employed to make the pedestrian realm seem more expansive than the 9 and 10-foot sidewalk widths would seem to allow. These include requiring permeable facades (with significant portions of glazing) for commercial frontages and semi-public spaces adjacent to the sidewalk, recessing building entries, and incorporating rhythmic vertical breaks and other articulation of building facades. These are incorporated into the plan's Urban Design Guidelines.

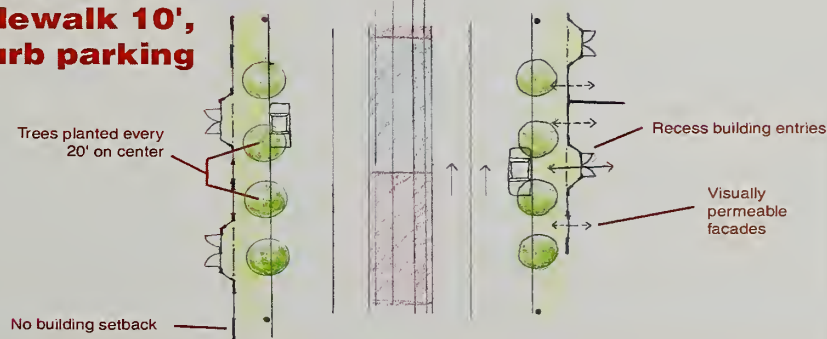
- In the long term, pursue the removal of a lane of through-traffic from Third Street, making room for the restoration of curb parking, wider sidewalks and bicycle lanes, with regional traffic shifting to other designated new or existing parallel routes (such as the 280 and 101 freeways, which parallels Third Street just a few blocks away).

Typical Third Street Urban Design Treatments

(A) Near light rail platforms: sidewalk 9', no curb parking, traffic next to curb



(B) Between stops: sidewalk 10', curb parking



ii. Access and Mobility

OBJECTIVE 3

Knit access to public transportation into the fabric of the neighborhood by ensuring that new and existing rail transit services are used to their full potential and by strengthening other transit connections to the Central Waterfront.

The new Third Street light rail line, due to open in 2005, will provide a direct rail link north to downtown and south to Bayview/Hunters Point and Visitacion Valley. While travel times will be similar to the existing bus service, the new line is likely to attract many new riders and dramatically improve perceptions of the accessibility of the Central Waterfront by transit. However, to ensure that the benefits of the new service are captured to the greatest possible extent, care needs to be taken to integrate stations into the neighborhood, particularly through improving pedestrian linkages.

The same principle goes for the 22nd Street Caltrain station, which provides direct access to Silicon Valley. It is poorly used by residents and workers in the neighborhood, and in fact the largest proportion of passengers arrive by car, traveling from other parts of the city to take advantage of the abundant, free on-street parking in the area. At present, the station is unpleasant and provides virtually no amenities. Shelter is provided by the overhead freeway. An open drainage ditch runs down the edge of the platform. Set 20 feet below grade between two dark tunnels, absolutely no “natural surveillance” can be provided by occupied windows or passing traffic, creating a space that is terrifying for many users, particularly late at night.

In order to address these issues, however, one outstanding question should be resolved or at least accommodated: will a second set of tunnels ever be built, allowing Caltrain to add a third or fourth passing track? As Caltrain completes additional tracks along the Peninsula to make way for its “Baby Bullet” express trains, the constraint for improved frequency will become the San Francisco tunnels. There is the opportunity to add a tunnel west of the existing bore, just like the unused second tunnel south of the station that Southern Pacific built nearly 100 years ago. If the tunnels and track are added, the southbound platform will need to be moved and the station envelope expanded.



While the majority of transit service and ridership in the Central Waterfront is along these north-south corridors, the need remains to improve cross-town routes. As the number of workers and residents in the neighborhoods increases, there will be greater demand for transit access from all parts of the city. The cross-town routes will also play an increased role as feeder routes to the light rail line.

Policy 3.1

Efficiently and effectively link the residents and workers of the Central Waterfront to Third Street Light Rail.

In order to take full advantage of the new service, the pedestrian environment throughout the neighborhood should be improved. All along Third Street, great care must be taken in placing utility boxes, poles, and other devices that might further reduce the walking space. On the cross streets—particularly those leading to light rail stations—special landscaping treatments should be completed, such as corner bulbouts and street tree plantings in order to improve the pedestrian experience traveling to and from Third Street. These improvements and their implementation are described in the System of Public Ways sub-section.

Policy 3.2

Better integrate the Caltrain Station at 22nd Street into the Central Waterfront through good design.

Any redesign of the station must take advantage of the monumental scale of its setting. The freeway, its support columns, the roadway bridge, and retaining walls enclosing the station were all built without regard to good urban design, especially at the pedestrian scale. In order to make the area more inviting, it must be improved by person-friendly design treatments.

Vertical circulation at the station must be improved, with either wheelchair-accessible ramps or elevators. While a pair of elevators at the station may be cost prohibitive, there are good opportunities for adding gentle ramps from the south side of the station. In addition, the station's presence in the neighborhood needs to be made more prominent, through street treatments and signage on pedestrian routes to and from the station.



The Caltrain Station has little relationship to or visibility from the street. (View from 22nd Street bridge)

Policy 3.3

Improve personal safety at the Caltrain Station, particularly through providing natural surveillance of the platform.

The station presents personal safety problems largely because it is so completely cut off from the rest of the city. The best way to improve the situation is to bring more activity within view of the platforms, for example with development that would offer active windows facing the platforms, as in Policy 3.4.

Shorter-term measures that would improve personal safety include vendors and more permanent uses to occupy the platform space or street-level space immediately overlooking the platform, and a staffed bicycle station.

Instead of bringing natural surveillance to the platforms it is possible to bring waiting passengers to places where natural surveillance is easier, for instance in an attractive, sheltered waiting area at street level, with real-time train arrival information. Such an area could be created on the 22nd Street bridge by removing some on-street parking and widening the sidewalk area. The Iowa Street right-of-way is also a possibility, along with widening the 22nd Street bridge itself.

Other improvements to personal safety such as the removal of potential “lurking spaces” in and around the station area, lighting improvements, the installation of emergency call boxes, and similar changes should be addressed.

In addition, Caltrain should be encouraged to remove obstacles to private vendors operating on Caltrain property, particularly regarding liability insurance, and explore the potential for staffed bicycle parking at the Caltrain station. If joint development and/or other means of natural surveillance on the platform are not forthcoming, encourage Caltrain to create a street-level, sheltered waiting area for passengers, with real-time information. Caltrain should also be encouraged to implement minor short-term improvements such as better lighting and the removal of “lurking spaces.”



Crosstown bus connections could become much more reliable with transit preferential treatments proposed in Muni's Long Range Vision Plan.

Policy 3.4**Create better crosstown MUNI connections.**

At present, crosstown bus service is provided by the 22-Fillmore and 48-Quintara. Service on the 48-Quintara in particular needs to be strengthened. Streamlining the circuitous routing over Potrero Hill could improve travel times. Muni is committed to improving these routes and their efforts should be supported. Muni is also planning dramatic improvements to the 22-Fillmore as part of its Long Range "Vision" plan. These include bus rapid transit treatments for the 16th Street corridor. Bus services currently serving the 3rd Street corridor will be replaced by light rail.

OBJECTIVE 4**Promote travel by bicycle by providing a safe, convenient, and attractive network of routes.****Policy 4.1****Extend and rebuild the street grid.**

The industrial and maritime land uses that dominate the Central Waterfront are characterized by large parcels that interrupt or discontinue the fine-grained street grid. This condition of a sparse street network and large block sizes promotes travel by the private automobile and works against encouraging people to travel by foot and bicycle, as distances of travel are more circuitous (and thus longer) and there are fewer alternative routes to streets with high traffic volumes. As with pedestrians, the enrichment and extension of the street grid is critical to making cycling an attractive and practical means of transportation. A highly connective street network provides cyclists with low-traffic alternative routes and directness to destinations. Proposed street connections are described in Objective 1.

Policy 4.2

Provide quality bicycle parking, particularly at transit stops, outside stores, near concentrations of employment, and in new housing developments.

Conveniently placed bicycle racks are important to facilitating bike travel. Quality bicycle parking should be provided for residents, workers, and commuters in as many places as is appropriate to support and encourage bicycle use. The following locations should be prioritized:

- Near MUNI platforms, to maximize the potential of the new Third Street light rail line. The number of people who can reach a light rail station within a reasonable time vastly increases if access by bicycle is enhanced. Bicycle racks can be placed on sidewalk bulbouts, on sidewalks, or in lieu of curb parallel parking for an auto.
- At the Caltrain Station, where parking should be secure enough to enable commuters to leave their bicycles all day with confidence. One option is for staffed, guarded bicycle parking, which would also improve safety by creating a lively presence in the area. Bike lockers, which protect the entire bicycle from the elements, are also recommended.
- On streets in the heart of the neighborhood, particularly Third Street at the cross streets and outside local stores.
- Near concentrations of employment, including Pier 70.
- In all new commercial and public development in the area, as mandated in the Planning Code.



Being generally flat, the Central Waterfront is an important link in several citywide bicycle routes.

To the greatest extent possible, bicycle parking should be in visible locations, where it can be informally supervised by passing people. Ideally, it should be sheltered and placed as close as possible to building entrances. Parking meters and street signs often double as bicycle racks, but many sidewalks lack these elements or have been retrofitted to make them unusable for this purpose. Bike racks can be placed on sidewalks or even in lieu of on-street parking.

Additionally, even if they wish to bicycle regularly for transportation, residents must often face the daunting task of carrying their bicycles in and out of their dwelling units, often up and down several flights of narrow, twisting stairways. Even when auto parking spaces are provided, there is generally no place to conveniently and safely store a bicycle for regular use. All new development should be encouraged to provide secure and convenient indoor bicycle parking for all residents and workers, especially if auto parking is provided.

Policy 4.3

Complete the pieces of the San Francisco bicycle network that are within the Central Waterfront. The primary goal is to create a safe, attractive north-south bicycle route from the Bayview/Hunters Point to downtown San Francisco.

The Central Waterfront is a critical section in creating a continuous, safe, comfortable bicycle connection between downtown and the Bayview/Hunters Point; it is flat and provides the most direct routes. Each of the main north-south streets in the Central Waterfront has its own disadvantages as a bicycle route. Minnesota and Tennessee Streets are currently discontinuous in the plan area and lack connectivity to the north and/or south, Third Street suffers from high-volume, fast-moving traffic, and Illinois and Indiana Streets currently lack connectivity to the north and/or south.



In the existing San Francisco Bicycle Plan (which is undergoing revision, slated for completion in 2003) Third Street is designated a bicycle route because of its relatively flat topography, directness, and unbroken continuity between downtown and southern neighborhoods of the city. However Third Street is heavily trafficked and the configuration of the street as a result of the new light rail does not leave room for bicycle lanes. In addition, the Bicycle Plan acknowledges the inability of Third Street to accommodate bicycles once the light rail extension has been constructed, requiring another north-south route through the neighborhood.

Given these constraints and the pending development scheme to the north (in Mission Bay), the best bike corridors through the Central Waterfront in both the short and long term are Indiana and Illinois Streets.

A north-south bicycle route should be established on Illinois Street by striping bike lanes and converting perpendicular parking to parallel to allow this. While large numbers of trucks use Illinois Street, there is no inherent conflict between a truck route and bicycle lanes. So long as lanes are wide enough to allow trucks to safely pass cyclists, and vehicle speeds are kept low so that cyclists are not exposed to wind shear, trucks pose no greater hazard to bicyclists than any other type of vehicle. The bike lane stripe, however, will need to be dropped where the bicyclist's path of travel abuts perpendicular parking that cannot be converted, or at loading docks, as discussed in Objective 4, Policy 2. This route would connect to downtown via Terry Francois Boulevard, and to Bayview/Hunters Point via the Port's proposed Illinois Street bridge over Islais Creek. The design of the Illinois Street bridge should provide ample and dedicated space for bicyclists apart from the truck lanes in the form of either striped bicycle lanes or a bicycle path separated from the truck lanes.

The Illinois Street bicycle lanes should connect to existing bike lanes on 16th Street and both Illinois Street and Indiana Street bike accommodations should connect to a new enhanced bike route on Mariposa Street (as mandated by the Mission Bay Plan).

Additionally, Indiana Street should be enhanced as a north-south bicycle route, also by adding bike lanes and converting perpendicular parking to parallel. Indiana Street provides direct access to the 22nd Street Caltrain Station, Esprit Park, and Islais Creek open space (bicycle lanes currently exist in the two blocks on Indiana Street between Cesar Chavez Street and Islais Creek). A four-block stretch of Indiana Street,



This short stretch of bicycle lanes on Indiana Street should be augmented north and south, turning Indiana Street into a useful "bicycle boulevard."

between 23rd and Cesar Chavez Streets, is currently one-way north, forcing southbound cyclists to divert one block east to Minnesota Street in order to continue south. That stretch of Indiana Street should be converted back to two-way traffic with bike lanes, or at least feature a southbound contra-flow bicycle lane for the one-way stretch.

Where the bike lane crosses freight rail or streetcar tracks, appropriate material should be used to pack the tracks to minimize the hazard to cyclists. Along all core bicycle routes, perpendicular parking should be minimized.

Other short-term improvements should include:

- Maintain bike lanes on Cesar Chavez and 16th Streets.
- Bicycle lanes should be created on Mariposa Street. The Mission Bay Plan suggests the inclusion of a landscaped bicycle path on Mariposa Street between Illinois and Indiana Streets (as well as setting back buildings along Mariposa Street to accommodate this connection). However, on-street lanes are more practical for transportation purposes (rather than a shared off-street path interrupted by cross-streets).
- Add bicycle lanes on Mariposa Street between Pennsylvania and Indiana Streets by eliminating a through-traffic lane that is not required for the volume of traffic carried by the street.

In the longer-term, the following improvements should also be sought where feasible to further improve north-south connections from Bayview/Hunters Point to downtown:

- Create a bicycle/pedestrian path along the Minnesota Street alignment between 22nd and 23rd Streets, where the street grid is discontinuous.
- Reconfigure the 25th/Indiana Street on-ramp intersection (if necessary) to facilitate two-way traffic with bicycle lanes or a contraflow bike lane.

Policy 4.4

Complete connections to the bicycle network north and south of the Central Waterfront.

Improvements to the bicycle network within the Central Waterfront will be most valuable if they do not end abruptly at the edge of the neighborhood. Connections to the north and south should be a particular focus for attention, as follows:

- Continue Indiana Street bike lanes from Cesar Chavez Street via a new bike/pedestrian path around Islais Creek to Rankin Street. From Rankin Street, cyclists should be routed via Davidson Street to Phelps Street, which should be redesigned as a “bicycle boulevard,” much like Palo Alto’s Bryant Street. Phelps Street connects to existing bike lanes on Oakdale Avenue.
- Work with the Port at the earliest opportunity to create a good bicycle connection from the southern end of the new Illinois bridge to Bayview/Hunters Point, via Phelps Street and Evans Avenue. Any construction of an Illinois Street bridge will involve significant reconfiguration of Amador Street and Cargo Way and any bicycle accommodation (i.e. on-street lanes or dedicated paths) necessary to link to Phelps Street and Evans Avenue.
- To the north, stripe bike lanes for the full length of Fourth Street in Mission Bay.
- Reconfigure King Street and the Lefty O’Doul Bridge to provide continuous bike lanes from Terry Francois Boulevard to The Embarcadero.
- See also Policy 4.5, below.

Policy 4.5

Pursue construction of a bicycle and pedestrian bridge over Islais Creek.

Once the light rail project is complete, the Third Street bridge will not be welcoming to bicyclists. The proposed Illinois Street bridge will be used primarily by trucks, also not the best environment for bicycles. In the long term, the city should explore the opportunity for a new bicycle and pedestrian bridge over Islais Creek, generally in line with Indiana Street, to provide a safe and direct north-south bikeway.

OBJECTIVE 5**Support the transportation needs of the PDR and maritime uses in the area.**

Much PDR activity requires extensive trucking and loading access.

In the areas south of 23rd Street and east of Illinois Street transportation policies and street designs should allow industry to flourish, while still accommodating the needs of pedestrians, bicyclists, and cars. Along many of these streets, the entire width of the rights-of-way is used for truck maneuvering, loading, and parking. These activities (and thus the flexibility of the roadway) must be allowed to continue if industrial activities are to remain viable. Loading docks should be allowed to face the street with the expectation that trucks will partially block the public right-of-way while loading. There should be fewer restrictions against curb cuts in these areas; sidewalks and street trees should not be required where their presence would conflict with truck operations.

Along Illinois Street, freight rail and truck traffic should have priority over other users. Bicycle lanes should be striped only to the extent they do not conflict with loading docks.

Third Street itself would be an exception to these policies. There, transit and pedestrian movement should have priority over other uses, and curb cuts should be discouraged and loading docks prevented.



Policy 5.1

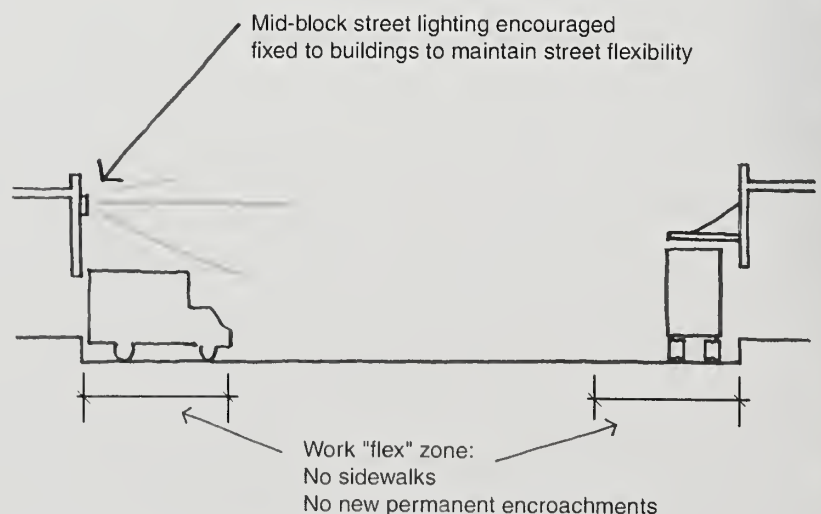
Give freight rail and truck traffic priority over other users on Illinois Street.

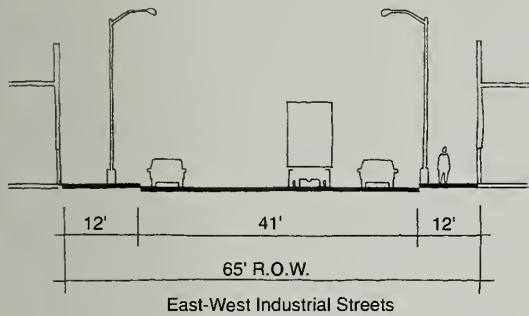
As discussed above in Objective 3, Illinois Street provides the best north-south bicycle route through the Central Waterfront. However, priority should be given to serving industrial uses on Illinois Street, and this should be reflected when striping bicycle lanes. The space for bikes should continue to be provided as if the actual bike lane were present, but the stripe should be removed so as to not encourage novice cyclists to ride too close to perpendicularly parked cars and trucks.

Policy 5.2

Enhance functionality of streets for service-vehicle access along north-south streets.

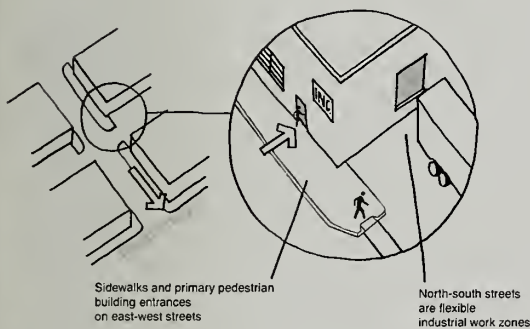
Improvements to Illinois, Indiana, Michigan, and Maryland Streets and Tennessee and Minnesota Streets south of 23rd Street will facilitate north-south movement of—and provide proper operating space for—industrial and service vehicles. Truck and service vehicles should be allowed to temporarily use part of the public right-of-way to facilitate maneuvering. These streets should function like industrial “woonerfs,” or shared street surfaces, where pedestrian space is less defined and separated curbed sidewalks are absent to facilitate truck circulation, loading and operation. Do not restrict curb cuts or require sidewalks and street trees on these streets where indicated in the accompanying diagram.



**Policy 5.3**

Improve east-west streets (24th, 25th, and 26th Streets) for pedestrian access and safety.

These streets should be developed to accommodate pedestrian travel, especially in order to access Third Street and transit stops. Sidewalks should be constructed where they do not already exist, and pedestrian space on these streets should be defined and protected with street trees and other elements as opportunity arises. Trees planted by private development are permitted on east-west streets but are not required. Curb cuts will not be restricted, but sidewalks must be constructed. New buildings or major renovations on corner parcels is encouraged to orient loading docks, service, and working areas on north-south streets, with primary pedestrian entrances (such as into offices), windows into working areas, and other more pedestrian-compatible uses along the east-west frontage.

**Policy 5.4**

Allow existing street encroachments to continue if their use will not significantly detract from efficient and safe public use of the street, and the use of the existing development presents strong justifications for occupying the street area.

New encroachments into the public right-of-way, even for industrial developments, should not be permitted. However, many existing industrial structures in the area have features, such as loading docks, that encroach beyond the property lines. If these encroachments are necessary to support the functional use of these structures for industrial use, they should be allowed to remain.

Policy 5.5

Maintain and enhance rail access to maritime facilities.

Freight rail is important to attract and retain active maritime uses along the waterfront. To accommodate a freight rail connection that has been displaced by the Mission Bay project, the Port should pursue construction of a new rail bridge across Islais Creek at Illinois Street. The bridge would provide direct freight rail and vehicle access to Pier 80 and an intra-terminal south of Islais Creek linking the Port's cargo shipping facilities. The Illinois Street Bridge would also underscore the role of Illinois Street as a major trucking and freight movement route.

This new bridge would allow freight trains to use an existing rail right-of-way from the mainline to Cargo Way, then up Illinois Street to Pier 50. In the meantime, the city should ensure that the existing rail line on Illinois Street is not compromised.

While current funding for the bridge does not allow for sufficient width for dedicated bicycle lanes, extra-wide travel lanes (14 feet) should be designed which would accommodate bicyclists relatively comfortably. The design of the bridge should allow modification should funding become available, or should the need for its use change, to allow the addition of bicycle lanes and sidewalks. The proposed Illinois Street bridge may be incorporated into the Bay Trail and the citywide bicycle network; if so, it should include sidewalks and bike lanes in both directions, with a particularly generous pathway on the east side consistent with Bay Trail guidelines.

OBJECTIVE 6

Assess the performance of the street system by measuring the overall movement of people and goods rather than just the movement of vehicles.

Policy 6.1

Adopt a set of person-movement-based performance measures for use in environmental impact analyses.

The California Environmental Quality Act (CEQA) requires that major development projects and public improvement projects proposals be evaluated for their potential impact on streets. At present, the performance of the street system is only measured by a single indicator—its ability to move vehicles—even though a successful street must work for all users. No account is taken of the delays experienced by

cyclists or pedestrians. Furthermore, no distinction is made between buses or streetcars and cars when evaluating delays. If a bus is delayed, dozens of people are affected, whereas if a car is delayed, it will only affect the driver and a few passengers.

This practice often results in unintended consequences. Pedestrian-friendly development projects built in already-congested areas or transit projects which would speed up bus or train service fair poorly in the hands of performance measures that track only seconds of delay for automobiles at intersections. In conformance with the City Charter's Transit First Policy and the Transportation Element of the General Plan, performance measures should instead track the ability of people to move through the system without regard for their mode of travel and should be related to the objectives of the transportation system. As the goal of an efficient transportation system is to move as many people as quickly, easily, and graciously as possible, a project that speeds up buses each carrying 50 people should be able to receive a positive evaluation even if it delays single-occupant automobiles. Performance indicators should thus be related to objectives such as speeding up travel times for transit riders and improving safety as well as creating a safe and enjoyable environment for pedestrians and bicyclists.

iii. Parking

Parking is perhaps the most powerful tool available to manage congestion in San Francisco. Each commuter parking space that is occupied means an additional vehicle trip at peak times. Residential parking spaces also contribute to congestion, particularly if they are provided at no additional cost to the tenant or owner, as they encourage people to own a car (or multiple cars) and to use it frequently.

In the Central Waterfront, parking policy must recognize that the new Mission Bay developments will consume virtually all the street capacity in the area at peak times. Therefore, there will be very little capacity to add more commuter trips by private automobile to and from the Central Waterfront. New commuter parking in the Central Waterfront can only be accessed at the expense of a reduction of commuter parking at Mission Bay or elsewhere in the vicinity.

At the same time, parking policy can help shape the economic success of an area and encourage development. Local merchants often rely on a supply of short-term, customer-oriented, on-street parking, while investors often feel that they need to provide a certain amount of on-site parking if their developments are to be successful.

The city's current minimum parking requirements, however, form a significant impediment to housing and other developments. Developers are often forced to provide more on-site parking than they consider is needed, and no allowance is made for locations that are easily accessible by transit (and thus require less parking). Minimum parking requirements of one off-street space for every housing unit limit the density of development that is possible and increase the cost of housing—particularly affordable housing. Affordable housing developers are either required to build more parking than they need—and pass the costs along to their tenants—or to go through the conditional use permit process, subjecting their projects to delay and possible restrictions or special requirements.

On-street parking availability in the Central Waterfront is currently very limited north of 23rd Street. There, parking occupancy averages around 95 percent during the daytime, which is comparable to downtown and South of Market. However, this is largely due to the absence of any form of parking management. Only 33 of the 3,515 on-street parking spaces in the Central Waterfront have any sort of restriction or

designation—there are no parking meters, residential permit restrictions, or time restrictions. South of 23rd Street, occupancy drops considerably as the density falls and the neighborhood becomes more industrial.

As the neighborhood urbanizes, new uses are added and new transit options become available. It is critical, then, that on-street parking in this area be managed more like parking elsewhere in the city. Meters, residential permit parking zones, pricing policies, and time limits must be used to give priority to residents and customers over other users, particularly commuters. This does not mean that no parking should be available for workers and commuters, but rather than unlimited free parking should not be provided.

Parking policies also need to consider the requirements of car-sharing operators. Car sharing can reduce the overall parking pressures on the neighborhood, by providing convenient access to a vehicle when required without the need for individual households to own—and park—a car. It can be particularly valuable in persuading households to dispose of a second car. As well as reducing car ownership, car sharing also helps to minimize car use, as the high fixed costs of ownership are made more visible.

OBJECTIVE 7

Manage off-street parking to encourage new housing development and support local businesses while recognizing the limited capacity of the street network to carry more automobiles.

Policy 7.1

Eliminate minimum parking requirements in the Planning Code and establish maximums for all uses within a half mile of the Third Street light rail stations and the Caltrain station, and for all below-market-rate, elderly, and institutional housing units.

Given the high level of transit accessibility in the Central Waterfront, there is no need for a minimum parking requirement. Within a half-mile of transit stations, developers should be allowed to provide as little parking as possible in order to meet the needs of their projects. Stations are within typical walking distance from almost anywhere within the Central Waterfront, with the exceptions of some parts of Port lands.

On pedestrian-oriented neighborhood commercial streets and near transit stops (e.g. 22nd and 3rd Streets) access to off-street parking is extremely detrimental to the integrity and functionality of the street. Further, to encourage transit use and recognize the limited capacity of the highway network around the neighborhood, while balancing this with the need to encourage development, minimum parking requirements in these locations should be converted to maximums. In other words, the number of parking spaces currently required in the Planning Code should be the maximum number a developer is allowed to build. The maximum requirements should also apply to all below-market-rate, elderly, and institutional housing units, in recognition of the lower car ownership rates of their residents.

Policy 7.2

Require parking to be rented, leased, or sold separately from residential and commercial space for all developments seeking conditional use permits.

For all types of development, the city should work to require that parking be rented, leased, or sold separately from residential or commercial uses. That is, residents and business owners should not be required to rent parking they do not need or want. This “unbundling” helps to distribute the cost of producing parking more equitably and to make it more visible to the user. While “unbundling” cannot be required directly through the Planning Code, it can be incorporated into any conditional use permit. Developers should be encouraged to unbundle parking costs for all other developments.

Policy 7.3

Limit long-range parking associated with Pier 70 opportunity site development.

As with the rest of the Central Waterfront, the nature of Pier 70 dictates highest levels of parking in the short run, with less parking in the long run as transit improves and new uses are added. In the short run, the Port should seek to make parking available for users at the maximum efficiency, through shared parking arrangements. More importantly, the Port should dictate in its leases that tenants be required to charge market rates for parking to their employees and residents, or offer a parking cash-out program whereby they offer the cash equiva-

lent to those commuters who do not drive. The Port should not require tenants to build or maintain any more parking than they desire. As at other transit-rich locations in San Francisco, there should be no free parking at Pier 70.

Where tenants have a long-term lease on land used for surface parking, the Port should provide every encouragement to develop those sites into higher and better uses.



In recent years, carsharing programs have met with resounding success around the city.

Policy 7.4

Promote car-sharing as an important means to reduce parking needs while still providing residents with access to an automobile. Provide space for city-recognized car sharing vehicles in convenient, visible locations, particularly at the 22nd Street Caltrain station and near transit stops on Third Street.

Car-sharing programs have gained popularity in the last few years in San Francisco as well as in other American and international cities. Members of car-share organizations are able to quickly and easily access vehicles located in their neighborhoods for everyday trips without taking on the costs and inconvenience of private automobile ownership. Carsharing organizations now offer cars at 30 locations in San Francisco, Oakland, Berkeley and Palo Alto, and have attracted over 2,000 members in the first 18 months of operation, with each shared vehicle serving the needs of ten to twenty households.

Carshare vehicles should be provided in convenient, visible locations for the use of local residents throughout the plan area, reducing the need for people to own their own car and freeing up curb space for other users. Space should be provided for vehicles belonging to established car sharing operations recognized by the city in convenient, visible locations as follows:

- At 22nd Street Caltrain Station.
- On-street on the Third Street corridor, as demand warrants. The ideal location(s) would be on side streets immediately adjacent to Third Street, where the vehicles would be highly visible but would not take up the most desirable short-term parking on Third Street or in front of neighborhood-commercial uses.

- In new large housing or mixed-use developments. Where new development includes on-site parking facilities, developers should be encouraged to offer spaces to city-recognized car-sharing organizations, especially in lieu of dedicated spaces for individual dwelling units.

Car sharing operators should negotiate with DPT for exemptions from street cleaning restrictions where their vehicles are located on-street. The section of the block immediately around a car-sharing location should be swept by car sharing staff, in conjunction with the regular cleaning and inspection of vehicles.

Policy 7.5

Encourage new development to provide innovative parking solutions and to make more efficient use of space devoted to parking.

New parking technologies have been introduced in recent years that dramatically reduce the space requirements of parking. Parking lifts and elevators, when incorporated into new developments, consume less floor area and can more easily be located at the interior of a site, reducing the negative presence of parking on the street environment. Use of these technologies should be encouraged where possible. However, in no way should new technology be used to increase the levels of parking required beyond those permitted or required.

The Planning Code should also be amended to lessen or eliminate the requirement for independent accessibility for every provided parking space, to allow for tandem parking and other space-saving and innovative solutions that minimize the space taken up by off-street parking.

OBJECTIVE 8

Manage public parking as a limited resource based on a system of explicit priorities tied to relative user needs.

There is a limited amount of curb space to accommodate a seemingly insatiable demand for parking by a wide variety of users who all vie for these limited spaces. On-street parking is not something to be eliminated, as it serves a real need for parking, graciously producing urban design benefits—such as buffering sidewalk activity from traffic. But as a limited resource under intense pressure, often the users that need it most and should be accommodated are not able to access it. An unregulated and exceptionally low-priced (or un-priced) parking supply creates excessive demand that the spaces clearly cannot meet.

Policy 8.1

Prioritize access to on-street parking and any public garages based on user needs.

The following priorities should be used to allocate publicly-accessible spaces:

- 1) Adequate parking space should be reserved at all times for the disabled.
- 2) Sufficient high-turnover spaces for short-term shopping and errand-running trips should be made available at all times through the provision of time-limited, metered parking, and pricing policies that discourage all-day parking and support turnover.
- 3) Residential parking should be provided along the curb, and curbside parking should be managed via a permit program (see subsequent policies).
- 4) Commuter parking should be discouraged and should only be provided to the extent that other goals are met.

Policy 8.2

Parking rates for new facilities should be set at full-cost or recovery market rates, and these costs should be borne by parkers

New public off-street parking facilities are unlikely to be required in the Central Waterfront for the immediate future. Should these be required, however, parkers should bear the full cost of the facilities, and rates should be set at the full cost-recovery, market level.

Policy 8.3

Institute a Residential Permit Parking program.

On residential streets around the transit station, residential permit parking should be instituted on a consistent basis to discourage commuters from using these streets to park and to prioritize space for residents and their visitors.

Policy 8.4

Consider revisions to the residential permit parking system so that it effectively prioritizes parking for residents.

The city's existing residential permit parking (RPP) system is intended to mitigate the impacts of commuters and other long-term non-resident parkers on residential streets. The program, as it is currently configured, does not however ensure that on-street space is available for permit holders. The program thus does not effectively deal with "spillover" concerns, where existing residents often oppose new development because of worries that new residents will compete for scarce on-street parking spaces. This results in demands for more and more off-street parking with new development, which in turn generates more traffic and degrades the public realm.

The city should engage in a study to identify revisions to the RPP program so that it more effectively allocates parking as a scarce resource and helps residents to welcome appropriate new development. Directions for further study include:

- 1) limiting the issuance of RPPs based on actual on-street parking capacity;
- 2) creating more of a true market for on-street parking (This would involve raising the price for a parking permit to a level that would require users to evaluate cost trade-offs of maintaining a car against the costs of other means of transportation);

- 3) enacting regulations stipulating that residents of new development on transit preferential streets are not eligible for a permit; and
- 4) channeling extra revenue from higher parking fees back into neighborhood improvements and transit enhancements.

These ideas, and others not yet identified, should be studied more closely by the city's Department of Parking and Traffic to identify their costs and benefits before proceeding to modify the RPP program.

Policy 8.5

Install parking meters on all streets outside the Dogpatch residential area north of 23rd Street.

The remaining curbside parking spaces north of 23rd Street that are not included in the Residential Permit Program should be metered, just as been done for most streets in South of Market. Time limits should be dictated by parking availability and by the needs of local businesses, and should be a maximum of two hours in the retail areas along 20th and 22nd Streets. Around the Caltrain station and major employment sites, longer time limits are appropriate at present to accommodate commuters and workers. However, as transit service increases, development in the neighborhood increases, and available parking and highway capacity diminishes, time limits should be reduced and all-day parking for commuters should not be encouraged.

The following should be pursued:

- Installation of two-hour parking meters in 20th and 22nd Street retail areas. (DPT)
- Installation of eight-hour meters around the Caltrain station and other areas where there are no meters at present, with the exception of residential areas. (DPT)
- Regular monitoring of parking availability and reduction of time limits as appropriate for proper management. (DPT)
- Use of more modern payment alternatives to parking meters such as pay-on-foot machines that accept credit and debit cards. (DPT)

OBJECTIVE 1

Connect the Central Waterfront to the Bay and surrounding neighborhoods through visual linkages and sight lines.

OBJECTIVE 2

Emphasize transit nodes and transit corridors.

OBJECTIVE 3

Maintain the fine grain of the Dogpatch area and build with respect to its character.

OBJECTIVE 4

Ensure a rich and active pedestrian realm, especially along neighborhood commercial streets.

OBJECTIVE 5

Respect and build from the successful established patterns and traditions of building massing, articulation, and architectural character of the area and the city.

OBJECTIVE 6

Foster a more pedestrian-supportive public realm in industrial areas along east-west streets.

OBJECTIVE 7

Encourage an active and public waterfront.



The new Gaia Building in downtown Berkeley has demonstrated to many that new development, when it follows basic rules of good urban design, can contribute positively to the place.

The distinctive and attractive qualities of an area derive in great part from the design of individual buildings and the way in which these buildings come together to form the public realm. This section of the plan defines the scale, character, and relationships that new buildings in the plan area should embody in addressing the public realm.

In addition to providing space for a myriad of private activities, buildings define the public realm. The built environment provides the setting for people to meet and interact informally and shapes the neighborhood's range of social experiences. The composition and siting of buildings frames our understanding of the relationships between private space and public space and the street environment, as well as influences our comfort levels and desires to occupy and use public spaces such as sidewalks, parks, and transit stops. Building height, articulation, setback, and spacing define the scale and character of streets, sidewalks, plazas, and open space that comprise the community's space. Buildings shape the view and regulate the amount of sunlight that reaches the street. The use of buildings and their relationship to one another affect the variety, activity, and liveliness of a place. Buildings with a mix of uses, human scale, and interesting design contribute to attractive and inviting neighborhoods, and are vital to the creation of lively and friendly streets and public spaces. In the best cases, the defining qualities of buildings along the street create a kind of "urban room," comfortable at the pedestrian scale, where the public life of the neighborhood thrives.

This section lays out the broad urban design objectives for building well in the Central Waterfront, followed by recommendations for height districts and design guidelines for all new developments and major renovations in mixed-use districts. Development in industrial districts should refer to the Planning Department's Industrial Area Design Guidelines (approved in August 2001) in addition to industrial area guidelines included here. Development in historic districts and renovations of historic structures should refer to the Historic Preservation section of this plan in addition to guidelines contained here.

OBJECTIVE 1

Connect the Central Waterfront to the Bay and surrounding neighborhoods through visual linkages and sight lines.

San Francisco's urban form is comprised of memorable patterns that help residents and visitors navigate through the city, understand relationships between different neighborhoods, and feel the uniqueness of place. The traditional street grid pattern, which creates unique view corridors, reinforced by tightly-knit streetfront buildings, is the strongest organizing pattern in the city. It should be used to connect the activity centers in the plan area as well as to link the Central Waterfront to its neighboring districts, and most importantly, to its greatest natural asset, the Bay.

New development should take the opportunity to "close the distance" between the inland residential neighborhoods and the Bay. Visual connection is one effective means for closing this distance, as distances seem much shorter when the destination is clearly visible, at least at intervals along the journey. Visual connection to the Bay, if not directly to water's edge, is a defining characteristic of the neighborhood. Generally, building heights should not obstruct public views of the Bay from Potrero Hill. Public "windows" to the bay should be maintained or created from within the Central Waterfront by extending the street grid as much as possible through Port lands to give views of the water or maritime activities. The plan's proposed building height limits and right-of-way extensions to the Bay fulfill these objectives.

Another way to "close the distance" is by creating enriching pedestrian-scale development that enlivens the experience of traveling. Walking (and bicycling) is more enjoyable (and distances seem to go by more quickly) when the urban scene, particularly the streetscape, is interesting and changes at a lively pace. The urban design guidelines in this section and other provisions in the plan ensure this scale.

OBJECTIVE 2**Emphasize transit nodes and transit corridors.**

A primary goal of this plan is to concentrate activity around transit nodes (Third Street Light Rail stops, Caltrain station) in order to enhance access and reduce the need to use automobiles. This emphasis should be reflected in the urban form of the Central Waterfront, recognizable at both the citywide and local scale. At the larger scale, greater building heights will mark the Third Street light rail corridor, as well as punctuate potential redevelopment near the Caltrain station should that become an option. At the smaller scale, corner buildings, especially at transit nodes and along streets where retail is required, will emphasize their location and prominence with slightly greater building heights, special roof elements, and greater ground-floor ceiling heights to accommodate retail.

OBJECTIVE 3**Maintain the fine grain of the Dogpatch area and build with respect to its character.**

Generally bounded by Third Street, Indiana Street, Twentieth Street, and the diagonal alignment of the former rope factory between 22nd and 23rd Streets, Dogpatch is a notable enclave of small-parceled, fine-grained, historic, primarily residential development dating back to the 1880s. The district, which includes a number of gracious older non-residential structures, is a very walkable, intimate environment, a contrast to the large floor-plate, large-parcel development that dominates the southern and eastern areas of the Central Waterfront. This scale also provides a significant contrast to the large recent loft-style developments to the north and south. Though a number of PDR buildings have mixed into the neighborhood, most are small in scale and fit in the fabric of 25-foot-wide lots. Rows of Victorian and Edwardian-era houses, originally constructed as industrial worker's dwellings between 1870 and 1910, are concentrated on Minnesota and Tennessee Streets. Twenty-second Street, defined by many mixed-use buildings, serves as the local commercial neighborhood heart. Restrictions on parcel consolidation, attention to compatibility with the historic building forms and detailing, moderation of the impacts of off-street parking, and careful crafting of building heights are necessary both to maintain the character of the neighborhood and to improve it as development in the area intensifies according to the plan. Controls to encourage the continuation of the unique mixed-use character of Dogpatch—with small-scale PDR businesses and structures sitting side-by-side with residential buildings—are addressed in the land use chapter.



The fine-grained pattern of deep lots with narrow frontage produces the intimate scale of Dogpatch.

OBJECTIVE 4

Ensure a rich and active pedestrian realm, especially along neighborhood commercial streets.

The pedestrian friendliness of an area is not only established by the state of its sidewalks and traffic conditions, but also is influenced heavily by the buildings and activities that line the streets and define the public realm. Building frontages that invite people to enter, that provide architectural interest and a sense of scale, and that are transparent enough to provide visual connections to and from the sidewalk help make the pedestrian environment more enjoyable and safe. The pedestrian interacts most with the ground story of buildings, and the greatest amount of attention must be paid to the articulation, transparency, and relation of building uses to the sidewalk on the lower levels of buildings. It is critical to ensure that pedestrian routes, especially in commercial areas, are not interrupted or disrupted by auto access and garage doors.

OBJECTIVE 5

Respect and build from the successful established patterns and traditions of building massing, articulation, and architectural character found in the area and throughout the city.

While architectural innovations and new, interesting styles keep a city dynamic and fresh, there are fundamental patterns of building composition that are essential to creating a pleasing public realm and establishing a human-scaled neighborhood character. Common rhythms of building projections, window detail and proportions, exterior materials, and overall building siting are a few key ingredients that must be maintained regardless of the specific architectural fashion employed. Key patterns of building design that contribute to the public realm are present in residential, mixed-use, and industrial development, and the guidelines in this plan address appropriate design responses for projects that face different types of streets.

OBJECTIVE 6

Foster a more pedestrian-supportive public realm in industrial areas along east-west streets.

While industrial areas must accommodate requisite supporting service activities, such as significant truck movements and loading, those activities can be reasonably concentrated on the north-south streets in those areas. East-west streets, which serve to link the neighborhood to transit along Third Street and toward the Bay, are encouraged to take on a more pedestrian-friendly quality. Even though industrial in nature, development along these streets should strive towards the goal of “building well” described in this plan’s design guidelines and in the city’s Industrial Design Guidelines (adopted August 2000).

OBJECTIVE 7

Encourage an active and public waterfront.

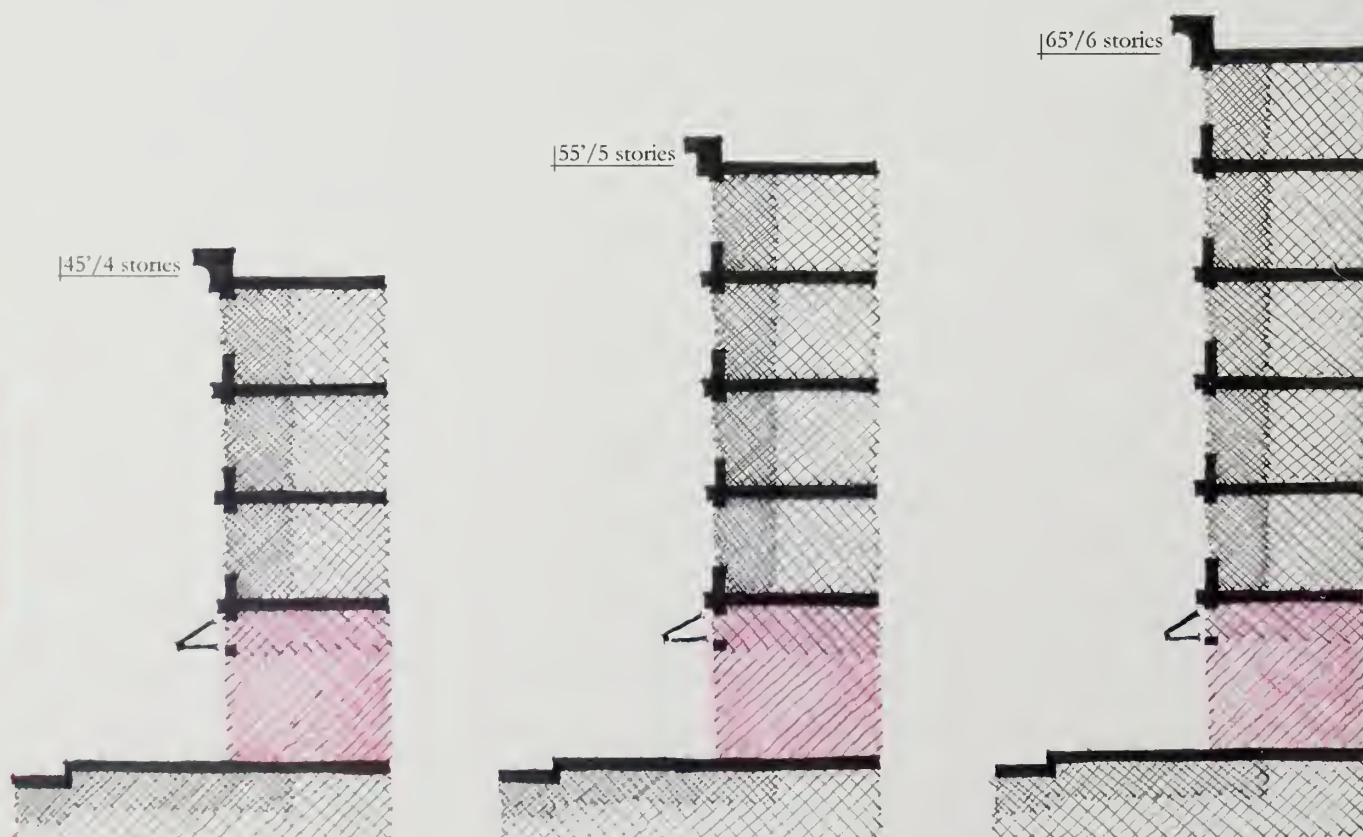
The existing waterfront areas of the Central Waterfront are generally difficult to access and feel somewhat “placeless.” With new development opportunities on the water’s edge, new construction should contribute to environments that are safer and more welcoming, offering more opportunities to enjoy this great asset—the waterfront. In order to make waterfront spaces feel more accessible and welcoming, new development will need to directly address and activate the waterfront with a pedestrian-friendly face and integrate public access into their siting and design. In all waterfront development, more active uses, including office or other pedestrian-friendly components of industrial developments, should be located adjacent to the waterfront edge to activate any public spaces.

The following policies are meant to realize these overall urban design objectives for the Central Waterfront.

Policy 1

Adopt height limits, based on the above objectives, that maximize housing opportunities and encouraging high-quality commercial spaces while producing buildings compatible with the neighborhood's character.

In many cases, building heights and bulks possible under existing controls are not tailored to creating the kinds of spaces that are the most successful in the neighborhood today. This plan proposes height limits that are optimized based on the economics of housing construction, building code requirements, and principles of good urban design. The result is a range of height limits that encourages new housing production in keeping with existing development patterns in the plan area. Where commercial uses are encouraged or required on the ground floor, height limits are tailored to allow more light and air into these spaces, for gracious, flexible, and functional retail spaces, and to foster a more active engagement with the public street.





Notable changes or features of the height recommendations are as follows:

- Higher structures have been located along the primary movement streets including Mariposa, 18th, 22nd, 24th, and Third Streets.
- Building height limits within 100 feet from the water's edge have been reduced to a height of 40 feet. This complies with Bay Conservation and Development Commission (BCDC) requirements.
- Height limits along the northern length of Third Street have been raised to 65 feet to be compatible with existing buildings, to emphasize this corridor, to reflect the higher heights in Misison Bay, and to encourage higher density development in support of the transit line.
- A height limit of 45³/₄ (maximum height 45', maximum 4 stories) along Twenty-second Street (between Third and Indiana Streets) and along Third Street (across from the American Can Company buildings) allows an extra 5 feet for high ceilings on the ground floor. Higher ground floor ceilings for retail and commercial uses allow greater flexibility and encourage more elegant and functional spaces. Limiting 45-foot-high buildings to four stories encourages such configurations.
- Height limits around the Caltrain station, including the MUNI Woods Yard, have been raised to 65 feet in order to encourage higher density, transit-oriented development opportunities in the event that the facility is no longer needed or can be redeveloped to include transit facilities and mixed-use housing.
- Height limits along Twenty-fourth Street east of Illinois Street are set at 65 feet and 55 feet to emphasize the connection from to Warm Water Cove and to encourage higher-density development to activate this street. These heights step down from Third Street toward the Bay.
- Height limits for industrial areas south of Twenty-fifth Street have been kept at 65 feet.
- Building heights in historic Dogpatch have been reduced to 40 and 45 feet (though limited to four stories) to be compatible with the existing building fabric and scale.

- Minimum height for new buildings along Third, Mariposa, Twenty-second, and Twenty-fourth Streets are established as follows: 30 feet in 40-foot and 45-foot zones; 40 feet in 50-foot zones, 50 feet in 65-foot and 85-foot zones. These minimum heights are important for creating a comfortable sense of enclosure for pedestrians (making the street environment feel like an “urban room”), increasing commercial and housing opportunities that take advantage of transit services, and increasing the vitality and sense of safety of the street environment. Aside from the streets mentioned here, there are no minimum height requirements.

Policy 2

New development should contribute to and enhance the best characteristics of the plan area, and adhere to the principles of good urban design.

New construction is likely to happen at different scales: modest structures will fill in gaps on small parcels along Third Street or within Dogpatch; some building owners will merely upgrade their facades; other large underutilized parcels will see dramatic redevelopment. Regardless of scale, new development should add to the district’s character, create a human-scaled public realm, and fit within the city’s fabric, regardless of architectural style. Larger-scale development efforts must take great care to not overwhelm the scale of the area and should help to establish a pedestrian-scale pattern. The following guidelines are included to instruct such efforts. Compliance with all of these guidelines is mandatory.

These urban design guidelines ensure that the fundamental principles of good neighborhood design are followed while allowing for freedom of architectural expression. A variety of architectural styles can meet these important design performance standards. As such, architectural style is not regulated in these guidelines. Instead, the guidelines pertain to the elements of building and site design that affect the scale, character, pedestrian friendliness, and other characteristics that affect the public realm. The intent is to encourage building design that will create an inviting and visually interesting neighborhood.

The Central Waterfront is home to a variety of architectural styles and building types, making it a unique place. These characteristics should be continued in the architecture of new development. However, new development in historic areas, such as Dogpatch, needs to respect the historic context with regard to detail, scale, proportion, texture, materials, and building form.

Design Guidelines for Building in the Plan Area

The following guidelines apply to all development in the Central Waterfront Mixed Use District.

The design guidelines are broken down into two main areas of concern: (1) massing and articulation and (2) treatment of the ground floor, which is further subdivided based on the type of street a building faces. For both areas of concern are *Standards*, which are mandatory requirements (often associated with quantifiable measures), and *Guidelines*, which are strong recommendations for good building design.

All diagrams and drawings illustrate urban design intentions, not actual design solutions.

(1) Massing and Articulation

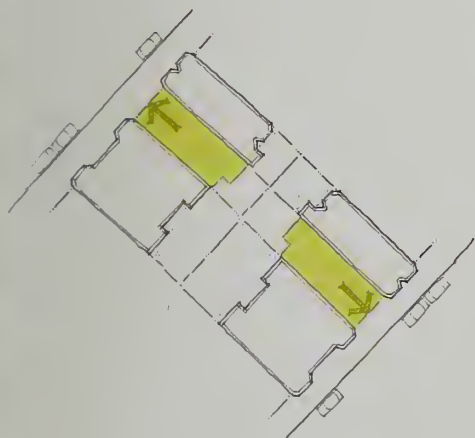
Standards:

- *Extend the city street network and create human-scaled blocks.* The city grid pattern provides an organized and measured relationship to give sense of place, orientation, scale, and comfort. Development patterns must be respectful of the existing street grid pattern and alignments to avoid the creation of “super blocks” that would be inhospitable to pedestrians and block (or fail to create where possible) public views and access to the waterfront. Development on large parcels should extend existing rights-of-way onto or through the parcel or create entirely new rights-of-way, such that the resulting development consists of definable blocks with a walkable perimeter measuring no greater than 1200 feet (based on the existing 200 x 400 foot blocks in the plan area). Blocks must be bounded on all sides by public rights-of-way or other means of public access (e.g. open space, pedestrian passages), and any block length longer than 400 feet must be bisected by at least one mid-block public pedestrian passage. Recommended street extensions are listed in the System of Public Ways sub-section of the Moving About section.



Dogpatch has a fine-grained parcelization that is integral to its character and helps create a human scale.

- *Significant parcel consolidation is prohibited to maintain the fine-grained scale in and around the historic Dogpatch neighborhood.* No parcel consolidation will be permitted that creates lots greater than 7,500 square feet or with street frontage greater than 60 feet on Tennessee Street between 18th and 23rd Streets, on Minnesota Street between 19th and 23rd Streets, on 22nd Street between Third and Indiana Streets, and the west side of Third Street between 20th and 23rd Streets. The neighborhood is built on a traditional fabric of lots that are narrow and deep, providing for enriching block faces, a diversity of buildings, and a stimulating pedestrian experience.
- *Build the bulk of buildings up to the edge of public rights-of-ways.* Buildings should embrace the public realm and the sidewalk, and set back only to accommodate elements that enhance this effect. Variations from this to accommodate wider sidewalks or front steps or stoops, to create lively storefronts, or to mark entrances should be limited to the ground floor as defined elsewhere in these guidelines. In the case of Historic Dogpatch, where a pattern of building setbacks exists, the prevailing setback pattern should be respected. In the case of through-lots, concentrate massing along public rights-of-way and locate any open areas at the center of the lot.



The bulk of new buildings should be built towards the sidewalk and any open space should be concentrated at the interior of the block.



Buildings project out to the sidewalk, and set back only to allow for inviting elements, such as front stoops, that enrich the pedestrian realm.



- *The ground floor of new development along selected portions of Third Street should be set back five feet from the property line to create wider sidewalks where the sidewalk narrows and curbside parking is absent alongside light rail platforms. To allow for more ample pedestrian space at transit nodes, a mandatory five-foot ground floor building setback is generally required along Third Street for parcels on the blocks on either side of the platforms at Mariposa, 20th, 23rd, and Marin Streets. This setback space must have a clear height of at least 12 feet (the bulk of the building should not be set back above this space), free of columns and other pedestrian obstructions, and should be treated as an extension of the sidewalk and allow public pedestrian passage.*

In order to avoid an undesirable "sawtooth" pattern of building setbacks (from a practical, aesthetic, and safety standpoint) due to the presence of buildings that are not likely to be redeveloped in the foreseeable future (such as historic structures, existing residential or large PDR buildings) *new non-corner buildings should be set back, and only be set back, if all buildings from either corner leading up to the subject buildings have been set back.*



- *Structured parking shall be designed as an integral building element, located within or below development, completely screened from view, and wrapped by active uses on all major street frontages.* Parking accommodation and service areas should be completely screened from view along Third Street, 22nd Street, and areas of public access along the waterfront, and they should create minimal physical and visual disruption to all parts of the pedestrian environment.
- *Buildings on sloping sites shall step up to accentuate the city's natural topography and their ground floors shall maintain a strong relationship to the sidewalk.* One of the physical qualities most revered in San Francisco is the strong relationship between buildings and topography—buildings continue to maintain a strong relationship with the street and the sidewalk as they rise and fall incrementally with the hills. Side-stepping up sloped streets accents the natural landforms, giving a vertical rhythm to the street. Where buildings, especially larger ones, fail to step up slopes, they “flatten” the city’s natural topography and tend to “deaden” the street front.



Buildings stepping up with the slope of a street is a San Francisco pattern.

New development on sloped sites should step up with the topography of the hill at regular intervals. Where there is a slope at the curb on major streets that exceeds five percent, the building façade and internal floors, especially ground floors, shall step up with the curb as follows:

<i>Average slope of curb</i>	<i>Maximum width of ground floor plane between step-ups</i>
Between 5 percent and 15 percent, inclusive	50 feet
Between 15 percent and 25 percent, inclusive	37.5 feet
More than 25 percent	25 feet

Guidelines:

- *New development on existing large lots (greater than 75 feet of street frontage), should be comprised of multiple individual buildings, rather than singular large masses.* Individual building should limit their overall horizontal and diagonal dimensions in favor of multiple buildings. The form of new buildings must consider the fine-grained human scale of other residential and street-front commercial buildings found throughout San Francisco, which are typically based on 25-foot wide building increments for row houses and neighborhood retail

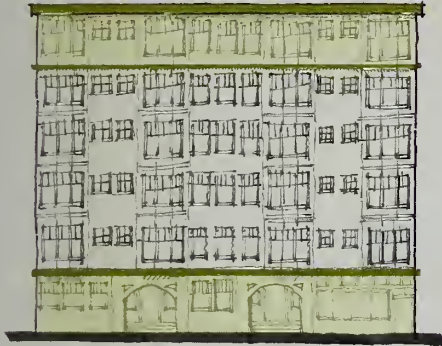


Corner buildings should establish their presence as landmarks.

- frontages, and that generally do not exceed 75 feet in width for larger apartment or commercial buildings. Common architectural techniques of varying massing planes, bay window arrangements, and surface façade treatments are generally unsuccessful in truly generating the subtle richness of a blockface composed of unique separate buildings. Individual buildings, even larger buildings, should maintain an expression of architectural unity; however there should be some qualitatively different elements of building expression among adjacent structures.
- *Building facades in the public realm (e.g. streets, parks, plazas) should be articulated with a strong rhythm of regular vertical elements.* This guideline is based on the walking speed of the average person and the optimum pedestrian experience of diversity in the streetfront every ten to twenty paces. Divisions and changes in building volumes, wall planes, and rooflines are encouraged. The use of bay windows or similar projections is encouraged, with vertical modules or breaks in façade plane from the ground floor ceiling height to the building cornice each 12-15 feet of frontage.
- *Special building elements and architectural expressions such as towers, special entries, or cupolas should be used strategically at key locations, including street intersections and near important public spaces.* They contribute to a building's distinction as a landmark, help to define a gateway, draw attention to an important activity, or help define public gathering places.



These guidelines do not imply a requirement for bay windows. However, bay windows serve a number of important functions in the articulation of buildings. They extend a building's private domain into the public realm, making for richer and more engaging interactions of buildings and streets and maximizing the opportunity for "eyes on the street." Other ways of achieving such building articulation and a flow between the interior of buildings and the public realm—outside of a strict requirement for bay windows—may also exist, but any alternative architectural solution must achieve these benefits to the public realm.



These elements must be integrated into the overall design of the building. Special corner treatments are encouraged for buildings that front onto the intersections of Third Street and 18th, 20th, and 22nd Streets.

- *Buildings should include a clearly defined base, middle, and top or cornice.* The middle of buildings should be clearly distinguished from the base and be articulated with windows, projections, porches, and balconies. Above five stories, the top floor(s) should be incorporated into an appropriately scaled expression of the building's top.

The roof, cornice, and/or parapet area should be well integrated with the building's overall composition, be visually distinctive, and should include elements that create skyline interest. Roof forms should be drawn from the best examples in the area.

- *Building facades should include three-dimensional detailing such as bay windows, cornices, belt courses, window moldings, and reveals to create shadows and add interest.* Other elements that may contribute include awnings, canopies, projections, trellises, or detailed parapets. As discussed, windows and cornices are especially important elements contributing to the creation of a comfortable "urban room" and pedestrian environment.



Cornices are not required. However, when designed well, cornices serve a number of important functions in relating a building to the public realm. They terminate the façade against the sky and create a definition that establishes the public street environment as an "urban room." They are an integral part of the façade composition, adding balance and helping tie the upper portions of a building to its base. Other ways of achieving these gestures to the public realm—other than strict inclusion of a cornice—are possible, but any alternative architectural expression of a façade must achieve these benefits to the public realm. The minimum recommended horizontal projection is two feet, with three feet preferable for buildings up to five stories.



Facade articulation, detailing, window reveals, and high quality materials create interest and enrich the public realm.

- *Above the ground floor the minimum window reveal should be two inches. Upper floors should include smaller, vertically proportioned windows punched into walls, projections such as bay windows, or small balconies. The typical window unit should be oriented vertically. Sliding windows or applied mullions on windows facing the street are not permitted.*

San Francisco's architectural tradition, and the fundamentals of good place-making, suggest that buildings that contribute most to the public realm have a visually satisfying proportion between a façade's openings and its solid planes. In the best places around San Francisco, a balance between openings and solid planes emphasizes pedestrian entries, windows, and other points of interest and de-emphasizes garages, storage, and mechanical areas.

- *High quality building materials should be used on all visible facades and could include stone, masonry, ceramic tile, wood (as opposed to composite, cellulose-based synthetic wood materials), pre-cast concrete, and high-grade traditional "hard coat" stucco (as opposed to "synthetic stucco" that uses foam). Rich detailing is encouraged to provide interest and create variation in wall planes. Materials and level of detail should be drawn from the best examples in the area. Base and top/cornice materials should be balanced in material and/or color.*

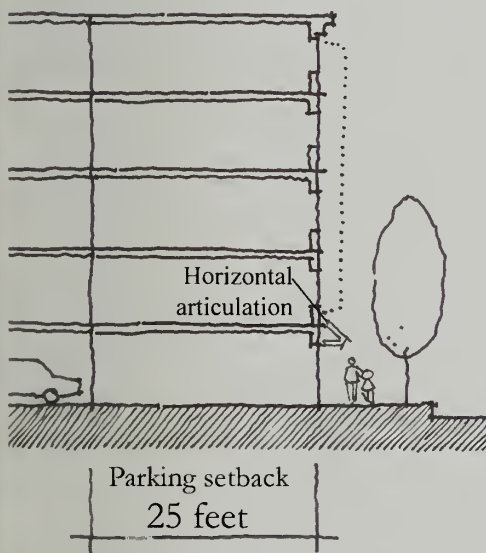
(2) The Ground Floor

The design and use of a building's ground floor has the most direct influence on the pedestrian experience along the street. Ground floor uses in the area are devoted to retail, service, and public uses and to residential units, lobbies and residential amenities in apartment buildings. These uses provide an active and visually interesting edge to the public life of the street, which is especially critical on neighborhood commercial streets.

Ground floors should be visually distinguishable from upper floors, with generous ceiling heights in mixed-use buildings. The base or ground floor of all buildings should contain active ground floor uses and avoid blank, unarticulated wall planes. The ground floor should be composed of a clearly legible framework of structural bays, flexible enough to offer the potential for varied and interesting street-front shops, restaurants, or lobbies for residences. Storefronts should include large windows, clearly defined entries, and attractive pedestrian-level detailing and ornamentation.

Standards:

- *Surface parking is prohibited between the sidewalk and the front of buildings.*
- *For parcels with greater than 25 feet of street frontage, parking is not permitted within 25 feet of the sidewalk. This space should support residential or commercial uses. For corner lots, one street face, preferably that which is not on a commercial or transit street, is excluded from this requirement, provided that parking is fully screened and not visible from the sidewalk. For residential-only buildings, parking submerged at least 5 feet below grade need not be set back from the sidewalk, provided that the parking is fully screened and not visible from the sidewalk.*
- *No more than 30 percent of the width of the ground floor may be devoted to garage entries or blank walls, except in no case shall garage entries be limited to less than 10 feet wide (except where curb cuts are expressly prohibited by this plan, such as on 22nd and Third Streets). No façade may feature garage entries*



that together total greater than 20 feet in width. Large garage entries are extremely detrimental to the pedestrian character and safety of a street. Vehicle traffic crossing the sidewalk should be contained to the absolute minimum necessary to facilitate access. Eight-foot wide garage entries are preferable for narrower parcels (less than 50 feet wide). At least 70 percent of the width of the ground floor must be devoted to windows, entrances to dwelling units, store windows and entrances, landscaping or planters, and other architectural features that provide visual relief and interest for the street frontage. Building entries and shop fronts should add to the character of the street by being clearly identifiable and inviting. Blank walls (absent windows, entries, or ornamentation) should be minimized. Display windows with unobstructed views into interior spaces and building entrances should line major streets. Service functions such as trash, utility, or fire rooms, should not be placed at the streetfront if possible.

Guidelines:

- *Primary building entries are encouraged to be set back, though no more than 5 feet from the street-facing façade; and should be no wider than 15 feet at the façade per individual entry. A recessed entryway provides transition space between the public sidewalk and the private interior of the building and presents a welcoming portal to the public realm. This is especially encouraged along Third Street.*
- *Use projections and recesses, along with changes in materials and color, to emphasize pedestrian entries and architectural features, and to de-emphasize garage doors and parking. These elements help to focus attention on the active spaces of a building and reinforce a human scale within the façade.*
- *First floor residential units are encouraged to be at least three feet above sidewalk level so that the window sill of these units is above pedestrian eye level in order to maintain the units' privacy.*



Raising lower level residential units at least three feet above the sidewalk raises windows above eye level of passersby



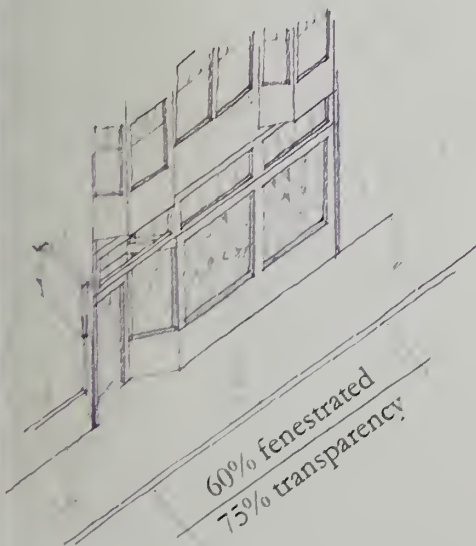
High ground-floor ceiling heights create enjoyable retail spaces and recessed entries are welcoming transitions from the sidewalk.

- *Lower level (1-3 story) residential units should be directly and independently accessible from the sidewalk, rather than from common lobbies.*

On commercial streets (Third, 20th, and 22nd Streets, and at designated retail nodes):

Standards:

- *Ground floor uses should be directly accessible from the sidewalk at sidewalk grade of the sidewalk onto which it fronts. Storefronts that require a patron to sink below or step up feel removed from the life of the street and are notoriously difficult to make successful. To have a strong relationship with the pedestrian realm, storefronts and residential entries should be accessed directly from and related to the sidewalk; steps up or down should be avoided. On sloping sites, taller retail spaces on the low end are preferable to sinking a portion of the retail space below sidewalk grade.*
- *Retail frontages must be no less than 60 percent fenestrated and 75 percent transparent. For improved pedestrian experience, dark or mirrored glass is not permitted. Treat solar consideration architecturally, through the use of recesses, eycrowns or awnings.*
- *All ground-floor commercial spaces must have at least 12-foot clear ceiling heights. Successful retail spaces have an uncramped atmosphere with high ceilings. They often have clerestory windows. To ensure a graceful and functional commercial space and to create a graceful shopping street, any ground floor commercial space incorporated into new buildings, including in 40 foot height limit zone, must have a clear ground floor ceiling space of at least 12 feet.*
- *Horizontal articulation is required between the ground floor and second story. A minimum 6-inch projection is suggested. The human scale of the sidewalk is of paramount importance on neighborhood commercial streets. Architectural detailing, such as a belt course or cornice at the ground floor ceiling height helps to frame the pedestrian space of the sidewalk.*



- *If provided, off-street parking must be accessed via side streets or alleys.* No new curb cuts are permitted as follows: (1) 22nd Street between Third and Indiana Streets, (2) all of Third Street in the plan area (between Mariposa Street and Islais Creek) for parcels that have multiple street frontages. For those parcels with access only from Third Street, curb cuts are strongly discouraged. Additionally, no curb cuts are permitted on Third Street within 75 feet of the corners at Mariposa, 20th, 22nd, 23rd, 25th, and Marin Streets, due to heightened pedestrian activity related to the transit stops and narrower sidewalks. If provided, off-street parking must be accessed via side streets or alleys. It is critical to maintain continuous storefronts and an active pedestrian environment uninterrupted by cross-traffic accessing off-street parking or dead spaces created by garage doors.
- *If provided, off-street parking must be setback at least 25 feet from street-facing property line, including parking above the ground floor.* Parking is not permitted as a use along these commercial streets, in favor of active uses that contribute to the life of the street.

(3) Industrial Areas

Development in industrial districts should refer to the Industrial Area Design Guidelines (approved in August 2001) in addition to industrial area guidelines included here.

Guidelines:

- *Locate office uses and orient building entrances facing east-west pedestrian streets.*
- *On pedestrian streets, loading docks are discouraged (if alternative street frontage is available) and their width minimized so as to support the pedestrian environment.*

IV Implementing The Plan

Implementation Approach | Public Improvements and Funding | Zoning and Planning Code Revisions



This section presents the overall strategy for implementing the plan. It describes the necessary actions and key parties responsible for realizing the plan's vision.

Ultimately, this plan is a policy document that proposes strategic changes to city policy and practice in a variety of areas. Implementing these proposals will require the active participation of city agencies and the community to make basic changes in how we manage both public and private actions. Based on this public draft, on-going community discussion, interagency comment, and environmental review will refine the implementation program described in this section.

Implementation Approach

This plan for the Central Waterfront neighborhood is a set of objectives, policies, and guidelines that represents a shared vision for the future of the area. It establishes a framework for ensuring that changes to the built environment, whether public or private, aid in maintaining or improving the fabric of the neighborhood and enhance its qualities as a place for living and working. The plan sets out a clear roadmap for both the public and private actions necessary to realize the vision presented in it. Ultimately, however, the extent to which the plan is carried out relies on the means available to implement its vision, and a public will to ensure that resources are directed to it.

This section presents a general implementation program that links the plan's policy framework to actual decisions about new planning controls, development proposals, and public improvements. Once the plan is refined, finalized, adopted by the Planning Commission and approved by the Board of Supervisors, this program will guide public decision-making in regard to improvements to the Central Waterfront well into the future. Ultimately, it is these decisions that determine the future character and quality of the neighborhood—the policies of this plan can affect positive change only to the extent that they are carried through in the day-to-day, incremental practices of city building.

This plan is a policy document, not a development proposal. As an implementing document of the city's General Plan, the Central Waterfront Neighborhood Plan goes beyond issues of land use, height, and building design, which are the traditional subject of zoning and the planning code, to address the related issues of transportation and the design of the public realm. It does not suppose that the recommended improvements will become reality at once, or that adequate funding is in place to implement them all. Rather, implementing this plan will be a matter of guiding many small actions taken over a number of years, reforming the controls that regulate new development and the management standards that affect the character and quality of our streets and public spaces.

To fully realize the plan, the city must make certain that the policies of this plan, once adopted, as well as other established policy, such as the City Charter's "Transit First" Policy and the city's General Plan, are adhered to. At its base, this plan calls for establishing a balance between two critical needs—jobs and housing. To this end, it is essential that the

Planning Department make changes that will maximize housing opportunity and coordinate with other city departments and agencies, such as the Mayor's Office of Economic Development, to establish, for instance, business support programs that will support and enhance the city's economy diversity.

The plan also defines standards for new development and for the use of streets and public spaces that implement essential policy directives. Positive change will come to neighborhoods like the Central Waterfront once we, as a city, take this step. It is essential that the agencies responsible for the city's streets—the San Francisco County Transportation Authority, the Department of Public Works, and the Municipal Transportation Agency / Department of Parking and Traffic—establish new funding priorities and standards for street management that move people as effectively as possible and improve streets as public spaces. These agencies have played an active role in the community planning process to date, and will continue to in refining the implementation program, and then in implementing the plan.

As this is the first public review draft in an ongoing community planning process, the implementation program is tentative and subject to considerable change as part of public review. This program will be refined as specific proposals in the plan are also refined, in response to feedback from the community, other city agencies, and elected officials.

In order for the Central Waterfront to evolve as a successful neighborhood, a conscious decision will have to be made by the city to make the improvements to the streets, open spaces, and other aspects of the public realm, as described in throughout this plan, especially in the Moving About section and the in the Urban Design Guidelines.

Some aspects of implementing the plan will require funding, many, however, do not involve significant, direct public cost. The plan for the Central Waterfront neighborhood will be achieved over time and in a number of ways, including the following, by:

- **Preserving existing identified values**—such as landmark structures and development patterns, and the neighborhood’s special ways of building—that are embraced by and addressed by the plan.
- **Providing clear roadmaps to private developers to help them make informed business decisions and sound development proposals that advance the goals of the plan.**
- **Guiding public development actions of the city** through the planning and development process so that development projects work to enhance rather than detract from the vision of the plan.
- **Orchestrating routine public actions** like street repair and transit improvements so that these actions work in concert incrementally over time towards the vision of the plan. Essentially, these kinds of actions are free of significant direct public cost beyond those normally associated with such actions.
- **Generating new public initiatives** such as revisions to the Residential Permit Parking Program, sidewalk widenings, or streetscape and open space improvements, that are specifically targeted to implement portions of the plan. These kinds of public actions have varying levels of direct public cost.
- **Capturing imagination and seeking out grant funding initiatives** for such things as street-tree planting programs, bike boulevards, streetscape improvement projects, or transit improvement projects. Rather than costing the public, these initiatives have the potential to capture funding from existing and new, as of yet identified, sources to support public planning and capital projects.
- **Helping to enable public oversight** of the public and private planning and development process by concerned citizens and public interest groups. Other than the time required of citizens, there is little direct private cost- and essentially no direct public cost- to these types of actions.

Priority Public Improvements and Funding

The proposals for improvements to streets and open spaces described in this plan vary widely in their range and scope—some can be implemented incrementally as scheduled street maintenance occurs, and others will require significant capital funding from city, state, and perhaps federal agencies. Working with other city agencies, these projects should be prioritized and included in the city's transportation improvements plan, administered by the SF County Transportation Authority.

Grants and other sources of funding should be pursued wherever possible. The Metropolitan Transportation Commission's "Transportation for Livable Communities" Program is one ideal source of funding for many of the pedestrian and open space improvements described in this plan. The Planning Department, working with the San Francisco County Transportation Authority (SFCTA), Municipal Transportation Agency/Department of Parking and Traffic (MTA/DPT), and Department of Public Works (DPW), should select one or two 'pilot' projects to propose for funding through this program. Working collaboratively, these city agencies can apply for grants that will fund refined proposals and capital expenditures for pedestrian improvements in the Third Street corridor, for example.

Implementation Program for Public Realm and Transportation Improvements:

- Bulbouts and related pedestrian amenities on east-west streets at Third Street: 18th, 19th, **20th**, **22nd**, **23rd**, 24th Streets – bold are priority. (DPW, MTA/DPT)
- Improve I.M. Scott School parcel as public open space. (Dept. of Recreation and Parks, DPW)
- Improve and expand Warm Water Cove open space, and enhance access points to expanded area. (Dept. of Recreation and Parks, DPW, MTA/DPT, Port)
- Acquisition of Irish Hill for public open space and related access/street improvements. (Pacific Gas & Electric, Dept. of Recreation and Parks, DPW, MTA/DPT, Port)
- Pier 70 circulation/pedestrian and open space enhancements. (Port)
- Enhancement and expansion of Islais Creek shore access west of Illinois Street. (Dept. of Recreation and Parks, DPW)

- Sidewalk improvements on east-west streets in industrial areas: 23rd, 24th, 25th, 26th, Cesar Chavez, and Marin Streets. (DPW, MTA/DPT)
- Bicycle boulevard enhancements on Indiana Street. (MTA/DPT, DPW)
- Illinois Street improvements, including sidewalks and bicycle lanes. (Port, DPW, MTA/DPT).
- Placement of wayfinding signage, including improved Bay Trail signage. (DPW, Association of Bay Area Governments).
- Placement of historic markers and “places of interest” signs (DPW, Port).
- Caltrain station improvements: lighting, signage/real time information, kiosks, vertical circulation, bicycle parking. (Peninsula Corridor Joint Powers Board)
- 18th and 20th Street bridge improvements. (DPW, MTA/DPT, Caltrans)
- Infill trees and pedestrian lighting on Third Street near light rail stops. (DPW)
- Parking meters north of 23rd Street. (MTA/DPT)

Zoning and Planning Code Revisions

The plan proposes to rezone property within the plan area in accordance with the land use controls described in Element 1 of this plan: "Land Use." The intent and basic controls of the proposed zoning as described in this plan will be refined through public review of this draft.

Amendments to the Planning Code and zoning maps will be required to establish new land use and height districts, as well as to implement the urban design guidelines and transportation and housing policies proposed in this plan. Once the plan is refined based on public review, environmental review, and comment, the Planning Department will provide a description of the necessary zoning and planning code changes as part of the plan's presentation to the Planning Commission for adoption and to the Board of Supervisors for approval. Ultimately, specific legislation will be proposed by the Planning Department to implement the proposed changes. The Department anticipates establishing a community process to develop detailed zoning controls.

Key Actions:

- Establish new Land Use and Height Districts
- Establish new Urban Design Guidelines
- Amend Zoning Maps
- Amend Planning Code

V Appendices

Table of Proposed Zoning Districts and Uses | Overview of the Citywide Action Plan (CAP) | Industrial Land in San Francisco

This section provides further research and background information in support of the plan.

The following table lists each land use district proposed in this plan and the permitted uses, including any special restrictions, for each. Refer to the Land Use section for explanation of the intent of each district and an accompanying map.

Central Waterfront Proposed Zoning Districts and Uses

P = permitted as a principal use

NP = not permitted as a principal use

N = permitted as accessory use (max 20% of total square footage) to a principally permitted use

C = permitted as a principal use by Conditional Use authorization only

Use	Zone: <i>Mixed-Use Residential</i>	<i>PDR</i>	<i>Heavy PDR</i>	<i>Pier 70 Mixed Use</i>
Dwelling Unit	P (required above 2nd floor, no maximum density, minimum 1 unit per 600 sqft of lot area)	NP	NP	NP
Commercial Conversion to Residential	P (above first floor) C (Third Street where retail not required) NP (ground floor where retail required)	NP	NP	NP
Dwelling Unit Demolition	NP	P	P	C
Live/Work	NP	NP	NP	NP
Group Housing	P	NP	NP	NP
Hotels, Motels, Inns	NP	NP	NP	NP
Office	P (1st and 2nd floors only; max use size 5,000 sf)	NP, X	NP, X	NP, X
Office in a building designated a historic resource	P (1st and 2nd floors only; 5,000 sf max use size)	NP, X	NP, X	P
Martimite-related office	P (1st and 2nd floors only; max use size 5,000 sf)	NP, X	NP, X	P
R&D-related office (provided that no less than 40% of total square footage is devoted to R&D labs)	NP	NP	NP	P
Retail	P (1st floor, 2nd floor limited); C (use size 5-10,000sf; max individual use size 10,000 sf)	P (max use size 5,000 sf)	X	P (max use size 10,000 sf)
Light PDR	P (1st and 2nd floors)	P	P	P
<i>Home and Business Service (Printing & Publishing, Photography Services, Graphic Design, Interior Design, Sign Production, Catering, Appliance Repair, Upholstery, Furniture Repair, Carpentry, Office of building/plumbing/electrical/roofing business)</i> <i>Arts Activity and Space</i> <i>Radio, TV Stations, Sound Recording, Film Production</i> <i>Light Manufacturing (Garment Manufacturing, Food Processing, Furniture Manufacturing)</i> <i>Warehouse/Storage</i> <i>Showrooms</i> <i>Counter services</i> <i>Auto Repair (mechanical)</i>				

IV. Appendices

Use	Zone: <i>Mixed-Use Residential</i>	<i>PDR</i>	<i>Heavy PDR</i>	<i>Pier 70 Mixed Use</i>
PDR	NP	P	P	P
<i>Wholesale Establishment (Food and Beverage, Construction and Maintenance, Furniture, Flowers)</i>				
<i>Trucking, Freight, Packing, Shipping</i>				
<i>Greenhouse or Plant Nursery</i>				
<i>Commercial Laundry</i>				
<i>Auto towing/storage</i>				
<i>Taxi/Limo/Shuttle</i>				
<i>Auto Repair (body work)</i>				
<i>Manufacturing</i>				
<i>Bottling, brewery, dairy products plant, malt manufacturing or processing</i>				
<i>Metal working</i>				
<i>Building construction and maintenance</i>				
Heavy PDR	NP	NP	P	C (only if uses are subject to a lease term of 5 years or less)
<i>Shipyard</i>				
<i>Cargo Shipping</i>				
<i>Concrete works</i>				
<i>Waste Management</i>				
<i>Heavy Manufacturing</i>				
<i>(auto assembly, foundry, iron or pipe works, cereals and distilled liquors, etc.)</i>				
<i>Recycling Facility (non-hazardous materials)</i>				
Not less than 500 feet from a zone permitting residential:	NP	NP	C	NP
<i>Auto Wrecking</i>				
<i>Scrap storage, junkyard</i>				
<i>Blast furnace, rolling mill, smelter</i>				
<i>Manufacture of corrosive acid or alkali</i>				
<i>Manufacture, refining, or distillation of: abrasives, acid,...</i>				
Noxious Uses	NP	NP	NP	NP
<i>Hazardous Waste Facility</i>				
<i>Rendering or reduction of fat, bones, or other animal material</i>				
<i>Stockyard, livestock feed, abattoir</i>				
<i>Incineration of garbage, refuse, or dead animals</i>				
<i>Production or refining of petroleum products</i>				
Research & Development	NP	P	P	P
<i>Research and Testing Laboratory, Experimental Laboratory</i>				
Automobile-related				
Non-accessory Parking lot	NP	NP	NP	C (only if subject to a lease term of 5 years or less)
Non-accessory Parking structures	C	C	C	C
Auto sales (new or used)	NP	NP	NP	NP
Auto rental	NP	P	P	P
Gas/Service station	NP	C	P	C
Institution	C	C	NP	C
Arts and Arts Activities	P (C > 10,000 square feet)	P	NP	P
Assembly and Entertainment				
Small A&E (<100 occupants)	P	P	NP	P
Med A&E (100-750 occupancy)	C (only permissible along 3rd St, 24th, Illinois Streets)	C (not adjacent to or across the street from parcels zoned Mixed Use Res on Minnesota or Tennessee)	NP	P
Large A&E (>750 occupants)	NP	C (not within 500 feet of Mixed Use Res parcels)	NP	C

Overview of the Citywide Action Plan (CAP)

The Citywide Action Plan (CAP) explores comprehensively the issue of how to meet the need for housing and jobs in ways that capitalize upon and enhance the best qualities of San Francisco as a place. The CAP will direct a mix of housing and neighborhood-serving uses to places with good public transit and urban amenities; new office uses to the city's compact downtown core; and industrial uses to core industrial lands in portions of the city's east side, thereby releasing the rest of the industrially zoned lands for other uses.

The work of the Citywide Policy Planning Division of the Planning Department is focused on developing General Plan policy and permanent controls—revisions to zoning, review procedures and planning code requirements—that implement the CAP.

THE CHALLENGES OF GROWTH AND CHANGE

San Francisco is at a critical juncture. About 800,000 people live in San Francisco today—66,000 more than in 1990. By 2010, 32,500 new residents and 56,000 new jobs are expected. As we grow, the city faces some very real challenges that affect our quality of life. There is an urgent need to find positive ways to accommodate growth, ensuring that new development enhances the quality and character of our neighborhoods and builds new places with the services and amenities that support urban living.

What are the challenges?

- *Increase the supply and diversity of housing opportunities.* Despite the recent economic downturn, we have a housing crisis—a crisis of affordability. Housing production has not kept pace with employment and population growth and we have among the highest housing prices on record. To catch up with existing demand, we need to build 2,720 housing units every year for the next five years, with the majority of these units priced to be affordable to San Franciscans earning the city's median income (\$86,100 for a four person household) or less.¹ From 1991 – 2000, we built an average of 1,030 units per year, with only 29% affordable below the median income.²
- *Build housing where it makes sense.* What little housing is built in the city is being built in the wrong places. The current market is locating housing in industrial areas where land is cheap and there is less opposition. We do not have adequate transit service, open space, shops and services in these areas, however, to create neighborhoods to serve a residential population. Instead, we need to locate new housing, jobs, and services where the city has the transit, open space and other services that support residential living.
- *Ensure space for all the vital functions of our economy.* While housing and office uses can pay more for space, modern industrial activities in production, distribution and repair play a vital role in supporting the city's economic vitality and provide a diverse job base for San Francisco residents.

¹ The median income covers the San Francisco Primary Metropolitan Statistical Area (PMSA), which includes San Francisco, San Mateo and Marin Counties. San Francisco Mayor's Office of Housing, 2002.

² "Expanding and Modifying the Affordable Housing Policy Requirements: Staff Report and Findings". San Francisco Planning Department, January 31, 2002.

Rather than allowing these activities to be priced out, we need to provide appropriate space for them to thrive. Fortunately, the kinds of land that make sense for these activities are “gritty” places by nature—poorly suited to support a residential population.

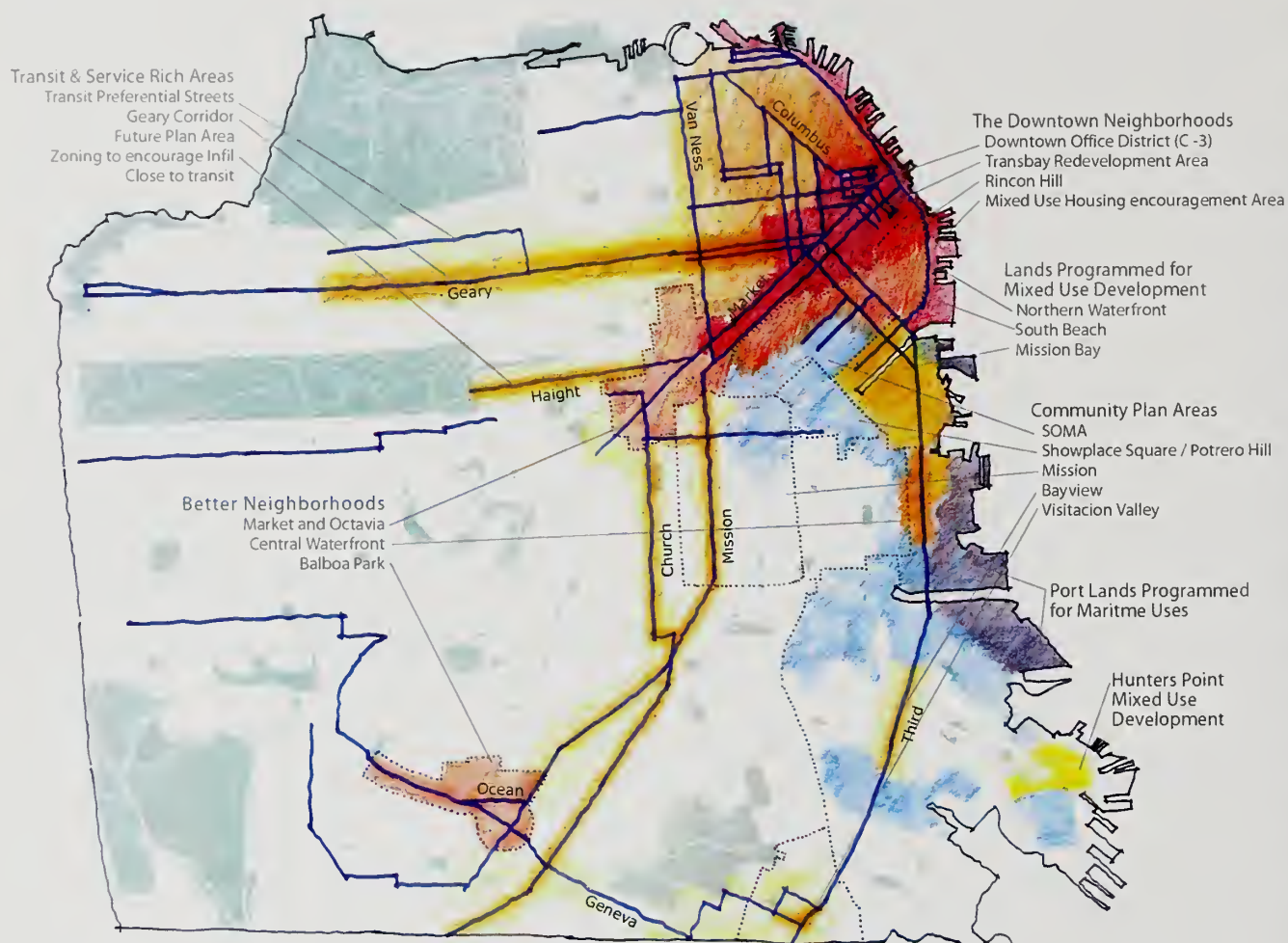
- *Ensure the efficient movement of people and goods on our streets.* Streets provide us with space to move around the city. As San Francisco grows, our streets are reaching their capacity to move cars, and cannot be widened without knocking down buildings. The solution ultimately is about geometry, not ideology. If our streets are to continue serving us, we must give priority to travel modes that make efficient use of street space like public transit, bicycling, and walking, and ensure that they share our streets safely with cars.
- *Recognize the value of streets as civic spaces.* Streets are also our most important civic spaces—they are where we meet and socialize, stroll and take in what the city has to offer. Streets should be more than means of getting from A to B—they should be places worth spending time in and of themselves. Adequate space for pedestrians, trees for shade, benches and stoops for rest, and facades that spill out with activity and intrigue help to make streets safe and comfortable places for people.

FIVE INITIATIVES OF THE CITYWIDE ACTION PLAN

The Planning Department’s aim is to plan for growth in a way that builds on the positive qualities of San Francisco and strengthens the character of our neighborhoods. Our planning efforts are intended to respond to human needs—ensuring that new development contributes to creating a more livable city. In response to the city’s housing crisis, we are revisiting planning policies and procedures citywide to encourage housing in the best possible locations, at appropriate densities and at prices affordable to those who live and work in our city.

The five initiatives of the CAP are:

1. **ENCOURAGING HOUSING AND BETTER NEIGHBORHOODS CITYWIDE.** Policy initiatives to encourage and facilitate the development of housing citywide, especially the development of affordable housing.
2. **THE DOWNTOWN NEIGHBORHOODS.** Planning for a new downtown neighborhood south of the downtown office core. This will include capturing housing potential in the downtown office district as well as encouraging new housing adjacent to downtown: in areas such as Rincon Hill, the Transbay Terminal area, and Yerba Buena Center, as well as lands designated for housing encouragement through the Planning Department’s community planning process.
3. **INFILL IN TRANSIT- AND SERVICE-RICH AREAS.** Policy initiatives for supporting and encouraging higher-density, mixed-use—primarily residential—infill in selected transit-rich corridors.
4. **NEW PERMANENT CONTROLS FOR CORE INDUSTRIAL LANDS.** The department is in the midst of an analysis to determine which of San Francisco’s industrially zoned lands are central to the city’s economic health, and developing new permanent industrial controls for those determined to be core lands.
5. **NEW PERMANENT CONTROLS FOR SURPLUS INDUSTRIAL LANDS.** Industrial lands determined through the department’s land use analysis and community planning process not to be strategically important to the city’s economic health will be made available for other uses, primarily housing. New permanent controls for these new uses are being prepared.



The Citywide Action Plan

POLICY BASIS FOR THE CITYWIDE ACTION PLAN

The five initiatives of the Citywide Action Plan are based on the land use planning policies of the General Plan. The Planning Commission and the Board of Supervisors will soon be considering two new General Plan elements that will update and articulate a new the city's land use policies. The Housing Element will update the 1990 Residence Element to reflect current changes in San Francisco's population and housing stock over the last decade and the challenges of encouraging housing production today. The new Land Use Element will summarize the land use policies that are now found throughout the General Plan. The Planning Department is in the initial stages of revising the Urban Design Element, as well. These

new elements will provide citizens and decision-makers with a concise and easily understood picture of the General Plan's vision for how the city will respond to growth and change in the future.

While these three new elements of the General Plan will contain the policy basis for San Francisco's future land use, the CAP's five initiatives will carry out the policies over the next few years. The Housing Element, the Land Use Element, the revised Urban Design Element, and the CAP are all proceeding at the same time. They will inform and reinforce one another as San Francisco grapples with the challenges of growth and change.

In addition to any products and plans that result from the CAP's policy initiatives, revisions will be made to the General Plan as necessary to support the ideas generated by the CAP.

PLANNING EFFORTS NOW UNDERWAY

Several community-based planning programs are underway which support the efforts of the CAP.

The Better Neighborhoods Program. The Planning Department's Better Neighborhoods Program is developing specific plans for three neighborhoods. The Better Neighborhoods Program is the first community-based area planning effort conducted by the City of San Francisco that proactively seeks to forge a shared vision of the best future for the city's transit-served neighborhoods. The Planning Department has been working with residents of three communities to imagine a better neighborhood, discuss the issues facing the city and how they play out in this area, share ideas and concerns, and get feedback and suggestions from technical experts to find solutions.

Goals and proposals have been developed from a series of community workshops, walking and bus tours, meetings with community groups, and discussions with individual residents, business owners, agencies, and institutions. Throughout the process, community members have been engaged and encouraged to comment and offer suggestions on the evolving proposals and scope of issues being considered; the Planning Department has used this ongoing dialogue to inform the Plan. A strong set of goals and a framework for neighborhood improvements have been developed out of this process for each of the neighborhoods.

Community Planning for San Francisco's Eastern Neighborhoods. The San Francisco Planning Department is engaged in a community planning effort for the City's Eastern Neighborhoods. This large area, consisting of the Mission, South of Market, Bayview, Visitacion Valley, and Showplace Square/Potrero Hill, has a tremendous diversity of people, housing, and businesses. It is also an area that has experienced extraordinary change and construction activity over the past five to six years. The goal of this community

planning process consisting is to develop a set of permanent zoning controls for the entire area as well as policies and procedures to guide future development in each of the five neighborhoods.

Rincon Hill Rezoning. The Planning Department is in the midst of rezoning Rincon Hill in order to encourage the residential development that was expected but did not occur with the establishment of the Rincon Hill SUD. This new zoning is intended to encourage the development of thousands of new housing units close to the Transbay Terminal downtown.

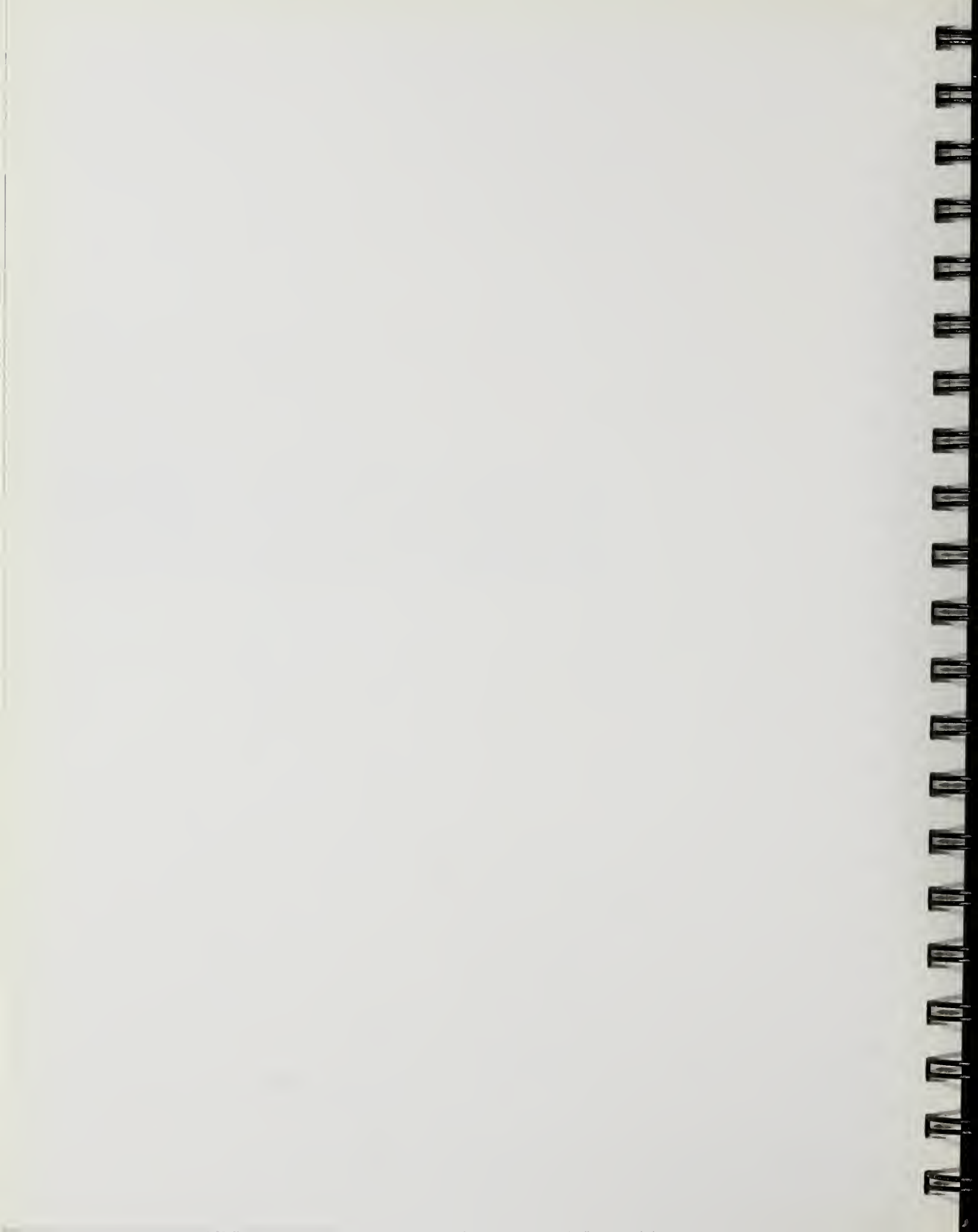
Transbay Terminal Planning. The San Francisco Redevelopment Agency is now in the process of testing concepts for redevelopment of the Transbay Terminal area. The Agency and the Planning Department are soon to undertake a new neighborhood planning effort to support the area's transformation into a full-service mixed-use commercial and residential downtown neighborhood.

Board of Supervisors Initiatives. The Board of Supervisors has initiated a number of policy initiatives that address the need for jobs and housing in the city and that need to be incorporated into the CAP. These initiatives include: recent legislation to exempt housing in the downtown from FAR calculations, special zoning for transit-oriented neighborhood commercial (NCT) districts, legislation to allow secondary units without parking in areas well-served by transit and neighborhood services, revisions to the city's inclusionary housing policy, and changes to fees for transit impacts, housing, childcare, parks and inclusionary housing.

Industrial Land in San Francisco: Understanding Production, Distribution, and Repair



San Francisco Planning Department
July 2002



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1

introduction

San Francisco's limited land area leads to competition over space for homes, businesses, and other uses. The Eastern Neighborhoods of San Francisco, including the land where industrial uses are permitted and are concentrated, have experienced the brunt of this competition as a result of economic growth in the recent past. Production, distribution, and repair (PDR) are the traditional users of the industrial space in these neighborhoods¹. In particular, the recent "dot-com" explosion and the City's need for new housing have greatly affected PDR firms and led to a debate about the appropriate land use policies in the Eastern Neighborhoods and their role in San Francisco's future. As San Francisco has recently lost a majority of its industrially zoned land to other uses including housing, this debate is all the more critical. The purpose of this report is to inform this debate and to help make decisions about the future use of the remaining industrial land in the Eastern Neighborhoods of San Francisco.

A healthy and vibrant city has a variety of economic activities. Such diversity allows a city to adapt to new circumstances created by shifting economic trends and cycles. A diverse economy provides businesses and residents with the goods and services

¹The term PDR is used instead of "industrial" to avoid conjuring images of heavy, "smoke-stack" industry, such as large manufacturing plants, smelting operations, and refineries.

they need to thrive. PDR businesses contribute to that diversity and are a fundamental part of what makes San Francisco work. While PDR businesses do not generate the same recognition and attention as downtown offices or the high-tech enclaves in the South of Market, what happens to them matters to the City. Now, as a number of San Francisco neighborhoods embark on planning processes to promote neighborhood improvement in the context of recent economic and social trends, PDR activities are put squarely in the limelight. This report will help readers better understand what PDR is, why it is important, and what needs to be done to do about this modest but critical part of San Francisco's economy. Should these activities disappear, the City could lose economic resiliency. Thus, a thoughtful appreciation of PDR is necessary to making rational decisions about our vision of San Francisco's future.

This report consists of six sections. Following this Introduction is an overview of *The City as a Land Use System*. This section includes a brief account of San Francisco's land uses over time and outlines the role of the Planning Department and its long-range Citywide Action Plan. The third chapter, *Production, Distribution, and Repair Activities: Definition and Changes over Time* defines these activities, giving an historical context of industrial activities in San Francisco. The fourth chapter is *The Role of PDR in the San Francisco Economy*. It addresses the role of PDR jobs, the wages PDR businesses pay, and the services they provide to this city. Chapter five, *What PDR Requires to Function in the San Francisco Economy*, identifies land, buildings, and labor force needed for PDR activities in San Francisco. Section six, *Evaluating PDR: Competitiveness, Compatibility, and Linkages*, takes into account the information presented in this document, assesses it via these three measuring tools, and concludes with key issues and guidelines for policy decisions.

2

the city as a land use system

A city's land use system is composed of various activities. These activities take up space in the City. Because activities are interrelated, where they occur is important. At a general level, San Francisco's land use system is characterized by a downtown core of mainly office-based activities, a ring of dense mixed-use neighborhoods that encircle the downtown, a collection of residential neighborhoods throughout the rest of the City, and a largely industrial east side. A network of streets and an extensive transit system connects all these parts to become a whole.

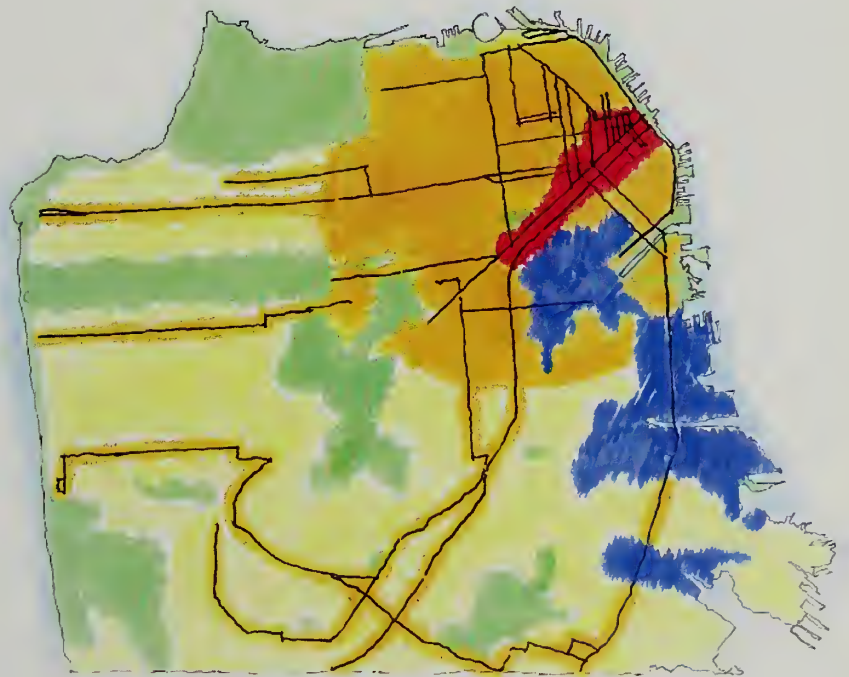
To function properly, different activities not only need appropriate locations but appropriate types of buildings as well. Location and building type are often closely related. Office towers are clustered in San Francisco's downtown and single-family residences characterize the Sunset. Financial, real estate, or law firms need the kinds of facilities found in downtown office buildings; they also enjoy proximity to one another and the various services that they engage. Manufacturing and wholesale trade firms require facilities and operating conditions different from retail trade and therefore these firms choose to locate in industrial areas where larger floor plate buildings are available, where trucks can easily load and unload goods, and where the land values allow lower rents. Not all activities are compatible with one another. While most people like to live near shops, few want to live next to a factory. Over

time, different activities collect together or remain separated in response to economic, social, and cultural conditions.

San Francisco Land Use Over Time

The focus of San Francisco's economic activities has changed over time, especially since World War II. As San Francisco's economy changes, so does its land use pattern. Changes in technology had a dramatic impact on the early post-war economy. With new methods of manufacturing, large, typically one-story structures replaced more compact multi-storied factories. These new building forms required large tracts of land that were abundant and much more affordable outside of City. The rapid growth of suburbs helped enable the process of industrial relocation. By the 1960s, containerization became the new standard for shipping goods. Land constraints, the City's location at the head of a peninsula, and a range of other factors made it extremely difficult for San Francisco to adopt the new technology and compete with Oakland for cargo. Subsequently, many of the City's distribution and warehousing jobs disappeared.

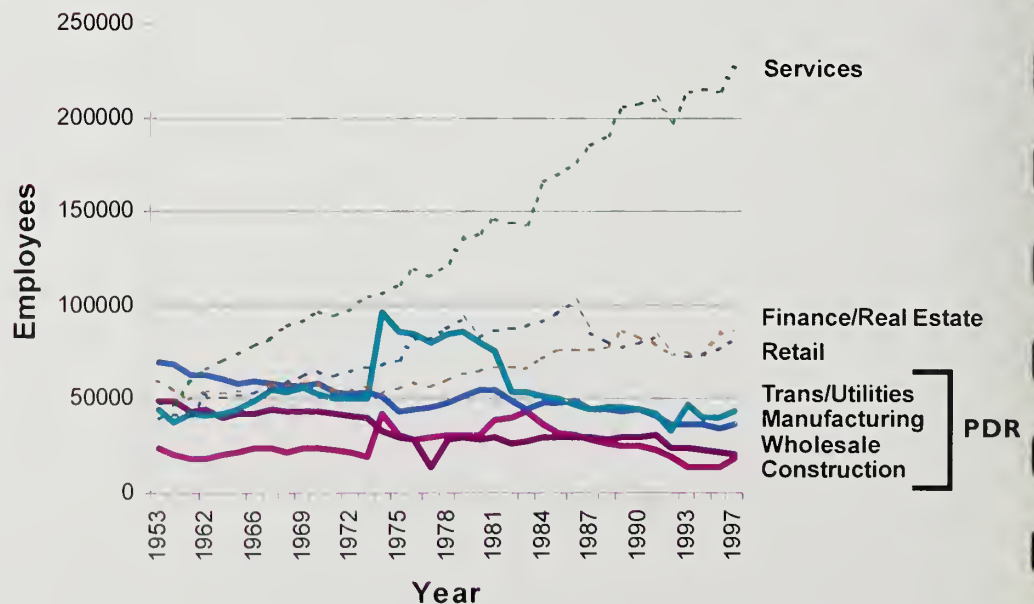
Generalized Land Use Pattern in San Francisco



At the same time that San Francisco's manufacturing and distribution functions were waning, the City was fast transitioning to an economy based on tourism and the service sector. The phenomenal growth of downtown signaled this change. New office buildings and the expanding range of businesses that support these offices replaced or re-used many of the older industrial buildings and warehouses near downtown. However, not all of the City's jobs concentrated in the downtown. A smaller but still significant number of manufacturing and distribution jobs remained. These jobs were found in the industrial lands South of Market, parts of the Mission and Potrero, Bayview-Hunters Point, and near the central and southern waterfronts. Businesses unable to compete with the office development boom of the 1960s relocated to these areas. These businesses became the core of the present day PDR.

The chart presents the change over time in employment for seven basic sectors of the economy for the period between 1953 and 1997². It shows the mix of activities that have constituted San Francisco's economy over time. While the balance of jobs has changed, all seven of these sectors have been consistently part of the City's economy for decades. Industrial businesses, now composed mostly of production, distribution and repair firms, clearly have been and remain an integral part of the City's economy. PDR jobs still make up 11% of the City's total employment.

Major Sector
Employment Growth



²A different classification system is employed for data from 1998 onwards and has not been included. Please note that data for the years 1954, 1955, 1957, 1958, 1960, 1961, 1963, and 1995 are not available.

Recent Trends

During peaks of economic cycles that center on one particular activity—the demand for office space generated by the dot-com boom, for example—the balance between land uses is altered and certain activities are temporarily favored. Though such cycles may be short-lived, they can have a permanent effect on other sectors of the economy not favored in the particular cycle. The economic expansion of the late 1990s set San Francisco's real estate market soaring. Many firms in the new multimedia and "dot-com" industries preferred the excitement of San Francisco's dense urban environment to the corporate campuses of Silicon Valley. In the City's industrial land, they found a ready supply of flexible, inexpensive space well suited for conversion to office space. At least 50 office projects have been built or are currently under construction in these areas.

Yet now, with the subsequent dot-com implosion, office vacancies are at record levels while businesses closed or displaced as a result of the initial boom are not likely to return. Just as economic cycles affect business sectors, they can alter the balance of the land use system and ultimately impact the City as a whole. It is not unlikely that another economic upswing would have a similar effect.

*What is Important for your Business?

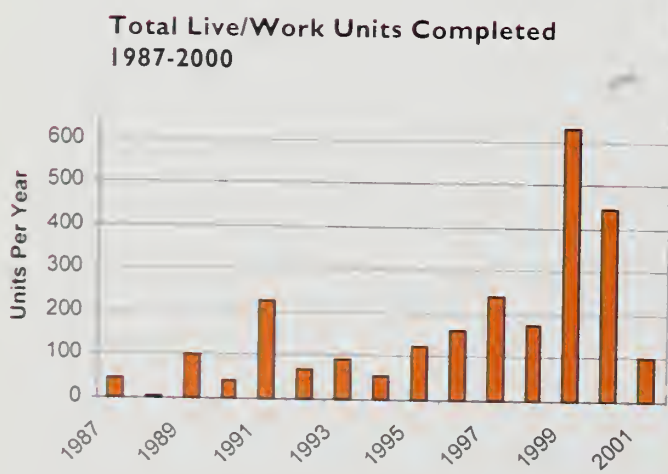
Proximity to Customer Base	92%
Proximity to Local Suppliers	82%
Proximity to Similar Businesses	81%

* Of surveys responding

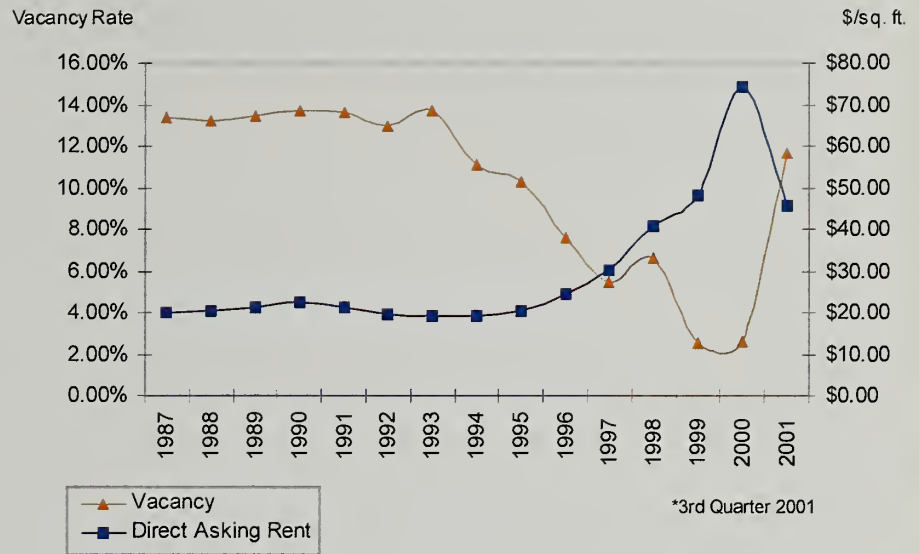
San Francisco Planning Department PDR survey

At the same time that office development was occurring on traditionally industrial land, these same areas became desirable residential locations for many, including well-paid high-tech workers who commuted to their jobs in the south. Land in the City's industrial areas is relatively inexpensive and easy to develop, and zoning regulations are more permissive than elsewhere in the City. This led to an increased concentration of housing production, especially live/work lofts, in the eastern part of San Francisco. South of Market saw the highest level of activity. In the last five years, San Francisco's industrially zoned land saw the construction of over 5,000 residential units (primarily live/work). Many of the traditional occupants of industrial areas—especially PDR businesses—were displaced by rising rents. Recently arrived residential neighbors, who complain about sounds, sights, and smells associated with many PDR activities, have made it difficult for many businesses to operate. While some found space elsewhere in the City, many others left San Francisco altogether, and still others went out of business.

Live/work Projects on Industrial Land



**Total Vacancy vs. Asking Rents
1987-2001***



Cushman Wakefield, 2001

However, many PDR businesses remain in San Francisco. Unlike their counterparts who have moved out of the City, these businesses stay because they have compelling reasons to be in San Francisco. They have extensive customer bases, suppliers, labor, networks, and the space required to run their operation successfully.

Land Use Planning

The City's challenge is to decide how to allocate land resources in a way that balances multiple goals and values. This task is complicated by the fact that there is a dynamic relationship between land use and economic trends. Cities regulate land use to avoid mixing incompatible uses and also to protect uses that are important but may have a hard time competing for land and real estate, especially during the peaks of economic cycles.

San Francisco's land use policy supports, promotes, and protects specific uses. There are zoning districts designed to allocate space for office, retail, and residential uses. There are no equivalent regulations for industrial activities. Because there are no zoning districts designed particularly for their needs, office and residential developers are encouraged to vie for the right to develop the remaining 1,000 acres of land where PDR uses are permitted, in the Eastern Neighborhoods. In San Francisco, for example, limited space and an unfettered market will favor office uses, which over time could replace print shops and warehouses.

The following are some of the key issues that San Francisco must address in its land use decisions:

- *Housing:* How much housing is necessary to meet the City's current and future needs? What kind of housing is necessary and at what densities? Where should it be built? How can we ensure that housing is built where services and amenities for residents can be provided?
- *Jobs:* What kinds of jobs are important to the City? Are some of these vulnerable? How can the City accommodate job growth, and where?
- *Land use compatibility:* Because space in San Francisco is limited and not all activities are compatible, how can a proper land use mix be achieved? This means not only protecting residential areas from "nuisance" uses, but also protecting desired uses that could be displaced by residential or other development.

San Francisco's perennial housing shortage is accentuated with economic growth. New housing construction failed to keep up with the growing population. The Association of Bay Area Governments (ABAG) set an annual housing production target for San Francisco at 2,700 new units annually in order to accommodate household growth and reduce commuting to the City. Meanwhile, housing production in the last ten years averaged just about 1,000 units. A substantial number of these new homes were built in the Eastern Neighborhoods, not only displacing jobs and permanently replacing industrial buildings and spaces, but also leaving new residents bereft of urban amenities.

In order to guide the use of land to meet the long-term needs of the City's residents and workers, the City Planning Department has developed the Citywide Action Plan. Capitalizing upon and enhancing the best qualities of the City, this Plan will direct housing to places with good public transit and urban amenities, new office uses in and around downtown, and appropriate industrial uses to core industrial lands. These initiatives are based upon the land use policies of the General Plan, and will be bolstered by a new Land Use Element, an updated Housing Element, and a revised Urban Design Element.

Although San Francisco is typically seen as built-out, numerous opportunities for new housing construction exist under current zoning regulations. Potentially, more than 23,000 new housing units could be built on vacant or underutilized parcels scattered across the City. An additional 12,500

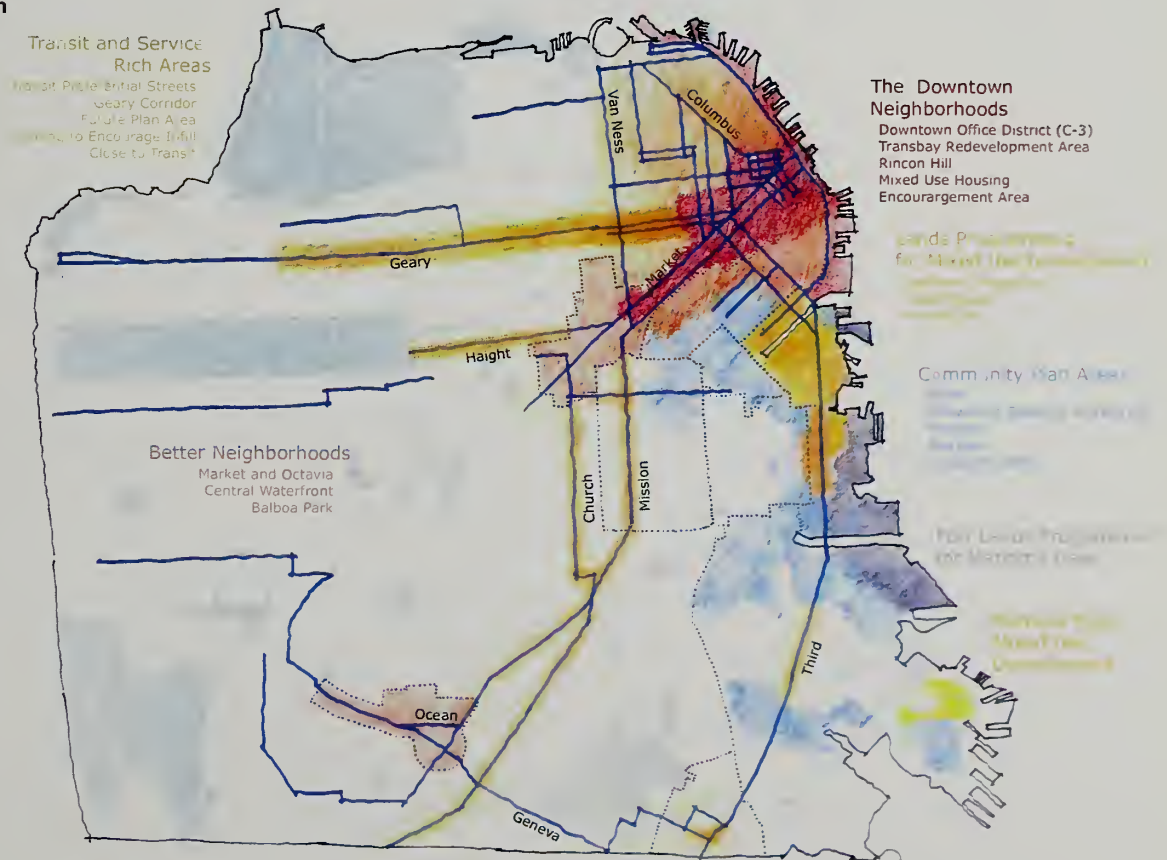
Legislation Affecting the Eastern Neighborhoods

- Mission Interim Controls
- Special Use District in northwest Bayview
- NC-3 Interim Zoning Controls on 3rd Street
- Live/Work Moratorium

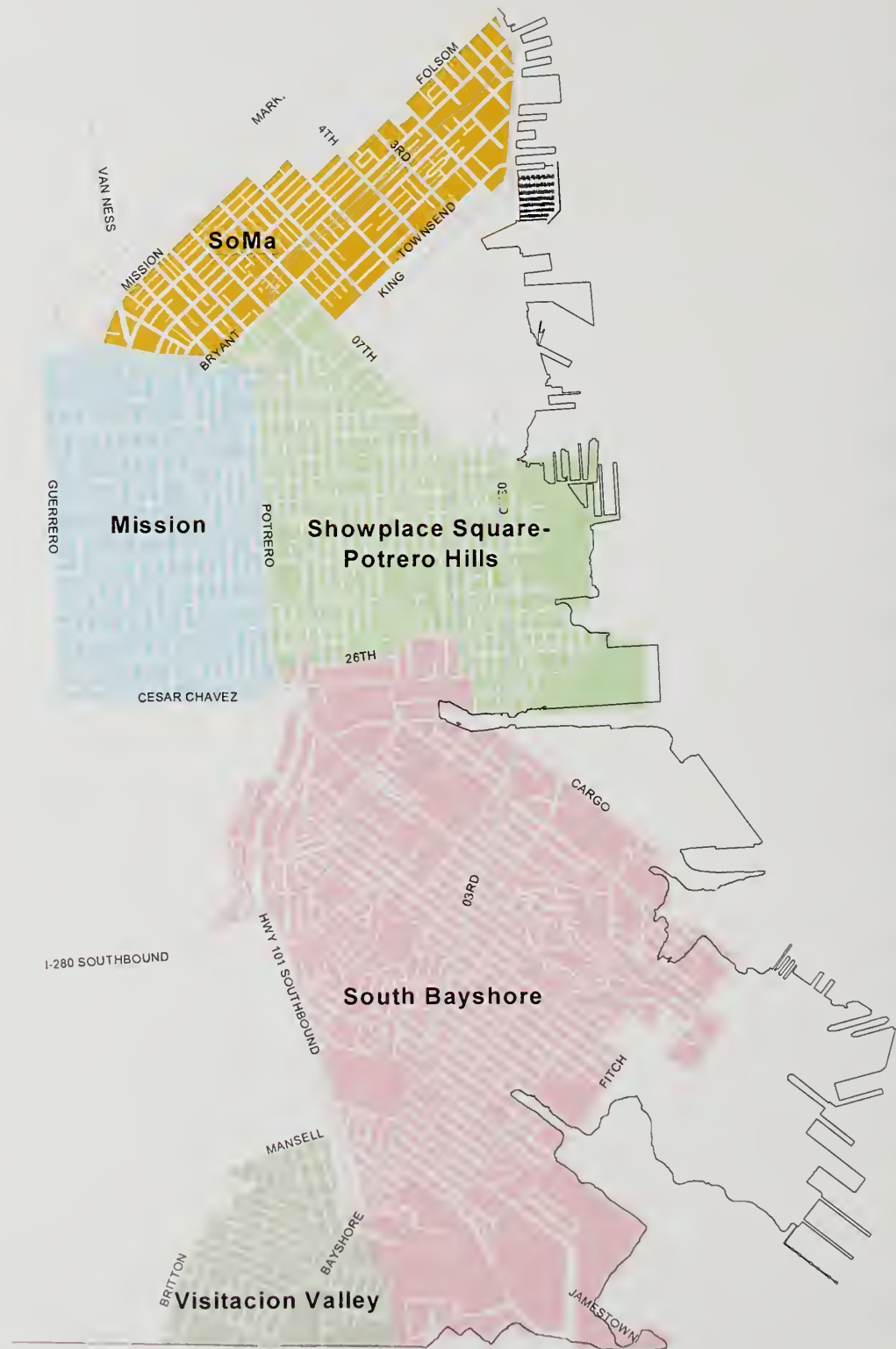
new units have been planned in the redevelopment of Mission Bay, the Hunters Point Naval Shipyard and the Transbay Terminal area. These potential sites for housing are located in residential districts, as well as in or near downtown, in neighborhood commercial districts, and in other transit-rich areas.

Additionally, the Citywide Action Plan initiatives in the Planning Department's work program will rezone these areas and expand the infrastructure and services in them in order to support additional residents. The Better Neighborhoods Program – with its pilot neighborhoods of Balboa Park, Central Waterfront and Market/Octavia – includes a housing component that will encourage and facilitate thousands of new residential units in these areas well served by transit. Rezoning initiatives, such as those proposed for Rincon Hill and the new Downtown Neighborhood will promote new housing construction in and around Downtown. Another Citywide Action Plan initiative is the community planning process in the largely industrially zoned Eastern Neighborhoods. Vacant or

Citywide Action Plan



Community Plan Areas



underutilized industrial land in the right locations is expected to accommodate some amount of housing. Through a series of workshops, the Planning Department has initiated efforts to rezone the City's five Eastern Neighborhoods – Showplace Square/Potrero Hill, Mission, South of Market, Bayview-Hunters Point, and Visitacion Valley. The goal is to resolve land use conflicts that have arisen between residential, industrial, and commercial development. Ideally, the full potential for housing will be realized through the success of the Citywide Action Plan, yielding almost 49,000 housing units without encroaching on the core industrial land necessary for PDR businesses.

Estimate of Potential for Development by Major Areas in the City (based on existing zoning, as well as policies and programs pending approval)

	Square Feet					Units
	Total Non-Res	Office	Retail	Industrial	CIE*	Housing
Better Neighborhoods	800,000	100,000	290,000	360,000	50,000	7,800
Greater Downtown	10,800,000	9,980,000	830,000			17,800
Programmed Areas**	14,300,000	7,030,000	2,040,000	916,000	4,285,000	8,200
Transit Corridors	2,270,000	390,000	720,000	540,000	610,000	4,200
Eastern Neighborhoods	10,290,000	760,000	7,260,000	4,220,000	910,000	4,500
Rest of City	6,460,000	3,150,000	2,080,000	480,000	750,000	6,100
TOTAL	44,920,000	21,410,000	13,220,000	6,516,000	6,605,000	48,600
ABAG Citywide Projections through 2020						
Net demand for employees	102,750	46,250	16,000	13,000	27,500	16,700
Net demand for total sqft	37,543,000	16,789,000	7,034,000	6,341,000	7,379,000	

*Cultural/Institutional/Educational

**Mission Bay, Hunters Point, PORT

3

production, distribution, repair (pdr): definition and changes over time

By the 1980s, the bulk of the larger manufacturing and distribution businesses had left San Francisco as suburban locations proved more attractive and affordable. A core of Production/Distribution and Repair activities, however, has stayed in the City and is projected to remain. These include not just more traditional manufacturing and distribution, but also a variety of new and specialized activities. Production, distribution, and repair (PDR) businesses generate the most jobs on industrially zoned land. PDR activities currently provide about 68,000 jobs citywide, or 11% of San Francisco's total employment. About 45,000 of these PDR jobs are in the Eastern Neighborhoods, subject to the greatest pressures. In broad terms PDR includes the following activities:

Section Three: Production, Distribution, Repair (PDR): Definition and Changes Over Time

Some industry types fall into more than one sector. For a complete description of each classification, please see Appendix A.

PDR Classifications

	INDUSTRY TYPE	2-digit SIC CODES
PRODUCTION	Printing & Publishing	27
	Other Printing & Binding	27
	Photography Services	72,73,38
	Graphic Design, Int.Design & Signs	35,39
	Radio, T.V. Stations & Comm Svcs	48,73
	Garment Manufacturing	23
	Other Apparel	22
	Utilities	86,48,49
	Sound Recording/Film Prod	36,38,78
	Catering & Food Processing	20,21
	Building Construction & Maintenance	17,15,16,34,33,32,14,28
	Concrete Works	17
	Furniture Mfg & Repair Woodwork	25,24,32
	Landscaping/Horticulture & Animal Svcs	75,78
	Chemicals/Plastics/Leather Goods Mfg	31,30,28,51
DISTRIBUTION	Wholesale Printing & Publishing	51
	Wholesale Apparel	51
	Transportation & Delivery Svcs	47
	Taxi/Limo/Shuttle	41
	Trucking, Freight, & Packing	42,73,47
	Parcel Shipping & Courier Svcs	45,44
	Public Warehousing & Storage	42
	Wholesale Flowers	51
	Food & Beverage Wholesale & Distribution	51
	Wholesale Construction & Distribution	50,51
	Furniture Wholesale & Showrooms	50,73
	Interior, Household & Appliance Wholesale	50,73
	Large & Heavy Equipment Wholesale	35,50
	Wholesale Auto Parts	50
	Export/Import Trading Companies	50,51
	Jewelry Wholesale Mfg	39,38,73,50
	Waste Management	49
REPAIR	Auto Wrecking & Scrap Storage Yards	50,73
	Furniture Mfg & Wood Work Repair	73,76
	Appliance Repair	76
	Auto & Boat Repair, Parking & Renting	75

- Food and beverage wholesale and distribution
- Fashion/garment design and manufacture
- Delivery services (messengers, airport shuttle vans, taxis, limousines)
- Event production and catering
- Construction contractors and building material suppliers
- Wholesale and retail of furniture, equipment, appliances, and furniture manufacture.
- Printers, designers, photographers; film producers, graphic designers, and sound-recording firms
- Repair shops for cars, trucks, equipment, appliances and whole. A discussion of the role of PDR as a sector of the economy is presented in more detail, including a discussion of employment, wages, and linkages in the proceeding section.

In short, PDR represents a range of business types and industries that despite their obvious diversity, share the need for relatively flexible building space, cheap rents, and in most cases, a separation from housing. The PDR classifications table highlights some important roles of production/distribution/repair in the land use system and thus, the City's economy as a whole. The role of PDR as a sector of the economy is presented in more detail in the proceeding section. It includes a discussion of employment, wages, and linkages.

Changes in Technology and Organization of Industries

To understand production, distribution, and repair activities in San Francisco today, it is important to place them in an historical context. Changes in technology, and industrial organization have had and will continue to have, a significant impact on PDR. Methods of production and distribution changed dramatically with the introduction of new factory assembly techniques pioneered by Henry Ford. "Fordism" enabled a dramatic increase in the efficiency of the mass production of goods, but the new techniques could not be applied in most existing, multi-storied buildings. Instead, land-consuming horizontal buildings were needed, and by the early post-World War II years, many industries, especially manufacturing, moved to the suburbs where there was sufficient affordable land to accommodate the new facilities. The tight constraints of San Francisco, and indeed of most older, central cities, could not provide the land necessary.

While employment in manufacturing in San Francisco dropped from 69,000 in 1953 to 36,550 in 1997, not every business and every job in the manufacturing sector left the City³. While some of these jobs are really office jobs (workers in corporate headquarters, for instance), many are in small-scale production. The continued presence of production and even small-scale manufacturing activities in San Francisco is largely explained by the following: new technology, new flexible methods of organization, and the increasing importance of information and knowledge in the production process. These improvements have resulted in radically different production techniques. The recently favored distinction between new economy/old economy is to a large degree a misleading dichotomy, since there is a blurring and overlap between the two. It is certainly true that "new economy" industries such as multimedia production and biotechnology could not have existed before the evolution of computers and digital technologies on the one hand and an understanding of the molecular structure and function of DNA on the other hand. However, many classic "old economy" industries use technologies just as sophisticated as those in any "new economy" sector. They apply new technologies to old problems and use new methods to achieve their traditional ends. For example, printing is still the art of putting ink to paper, but today's digital offset printing is vastly different in technique from its earlier counterparts.

Production

Today, production firms in San Francisco invest in more technology-intensive production and have higher value-added per employee than their counterparts elsewhere in California. They tend to produce short runs of specialized goods with a significant design component rather than standardized, mass-produced items. They are in San Francisco because it allows them access to a specialized market and labor force and they are able to pay a premium to be here. San Francisco-based production firms are often significantly different from production firms elsewhere⁴.

³Data is from US Census, County Business Patterns, 1953, 1997

⁴All the information in the subsequent sections is from Chapple, Karen (1998), "The Transformation of Traditional Industries in San Francisco: the Cases of Printing and Apparel Manufacturing." IURD Working Paper #701. Berkeley, CA: Institute of Urban and Regional Development.

The printing industry is such an example. From the end of World War II until the mid-1970s, San Francisco was considered the printing capital of the western United States. Just as many apparel firms now prefer less expensive locations, so the printing industry has decentralized. However, the firms that have remained in San Francisco have invested heavily in technology and new production processes, such as laser scanners and desktop publishing. Capital expenditures per employee in the printing industry in San Francisco increased by almost 70% from 1987 to 1992 in San Francisco, while they declined in California as a whole. In 1992, value-added per employee in the San Francisco printing industry was \$65,700, while the figure for California as a whole was \$58,200. High-end garment manufacturers have also invested in technology by adapting computer-aided (CAD/CAM) pre-production systems for in-house design, employing automated cutting and spreading systems, and implementing electronic data inventory (EDI). One statistic that highlights San Francisco's focus on investment is the value-added per employee, which was \$72,000 in San Francisco apparel firms in 1992 but only \$41,000 in California as a whole.

Local manufacturers cite quick response as one of the key strengths of a San Francisco location. San Francisco provides proximity to markets, employees, and an established network of experienced contractors able to fulfill orders on short notice, as well as to the high-end retail outlets that sell the final products. Firms that have chosen San Francisco as their location operate differently from their counterparts

Distribution of PDR Businesses in Eastern Neighborhoods 2001

	Production	Distribution	Repair	Total PDR	Total Businesses	PDR as % of Total Businesses
SoMa	508	406	130	1,044	2,344	45%
Mission	347	230	142	719	2,283	31%
Showplace						
Sq/Potrero Hill	230	472	57	759	1,446	52%
Bayview	481	559	186	1,213	1,977	61%

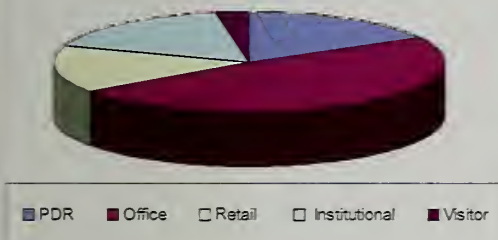
Distribution of PDR Jobs in Eastern Neighborhoods 2001

	Production	Distribution	Repair	Total PDR	Total Jobs	PDR as % of Total Jobs
SoMa	7,064	5,899	762	13,725	38,302	36%
Mission	4,478	1,628	772	6,878	18,063	38%
Showplace						
Sq/Potrero Hill	2,053	5,373	699	8,125	17,907	45%
Bayview	5,710	9,764	1,191	16,565	25,794	64%

PDR Businesses and Jobs Eastern Neighborhoods 2001

	Production	Distribution	Repair	Total PDR
Businesses	1566	1654	515	3735
Jobs	19305	22564	3424	45293

Citywide Employment by Sectors



elsewhere because they rely on a high degree of communication with their customers, use more technology, and focus on production of small numbers of specialized, high-end goods rather than mass production. These are the main reason that high-end firms are willing to pay higher rents than other manufacturing firms to be in San Francisco. Their investment in technology and their focus on high-end markets allows them to do so. However, these firms can not compete with other uses that can afford to pay even higher rents. Metal fabricators, caterers, furniture makers are thriving in the exploding niche market of custom made, locally produced goods. These firms rely heavily on skilled workers, specialized capital equipment, and technology. In short, they have moved away from the model of mass production of price-sensitive commodities towards shorter production runs and specialized high-end goods. As a result, they value proximity to customers in order to facilitate quick turn-around times and continuous feedback.

Because they operate differently, these firms have different criteria for choosing locations and buildings. In some cases, this can mean a shift away from single-story buildings and a return to older, multi-story building types, as well as the blurring of the lines between office and production space. Many find an urban location appealing because of the proximity to customers-whether downtown businesses or clothing stores-and intellectual resources such as UCSF. They are also drawn to San Francisco's reputation for creative labor pools. These companies need employees with experience as well as an artistic bent essential, for instance, to design oriented businesses.

In some ways, then, production industries-or at least certain firms-are coming full circle. They are able to make more efficient use of land and therefore are able to afford to be in the City again. They operate in higher density environments close to academic resources, a specialized labor force, cultural amenities, and customers. For example, the technological evolution of the printing industry has altered its space requirements. In pre-press, laser scanners are replacing bulkier strippers; in production, equipment is rapidly becoming smaller and

Remodeling a home

Day 1: We started at Superior, the furniture-dipping place, to get the mantle piece stripped. One of the last of its kind in San Francisco, it is a BIG space with lots of old wood stuff around. There is an unpaved street out front, where the metal fabricator next door was working on some long metal thing. The guy has been in business for years, and does good work. He had several employees on site.

Next, onto the plumbing supply place where we bought toilets, sinks, and faucets. We had lots of choices. We needed to get sinks and faucets so that the marble counter could be cut. For marble, we started out on at T&L. It turns out they have only granite, so we drove down Bayshore to G&G, which they recommended, and on the way passed Clervi—the Cadillac of marble places. We were tempted by the potential luxury of it and went in. Their office has big pictures of marble quarries. There are lots of guys slicing marble, and a huge room with long bins of marble slabs. I spent time going through them and choosing one.

The last stop was Paige Glass, on Mission Street, to talk about shower doors. They have an enormous variety of glass, and can do a lot with it—a lot more than the shower-door man who came out to our house. They also have a big framing operation for glass and mirrors. The guy is a combination glass technician/antique dealer/art collector. You won't find that at Home Depot, only in San Francisco.

Day 2: We are extending the stairway railing (banister, baluster, spindles, whatever), so we need to buy the components. We spent lots of time on the Internet looking at specialty stair makers, but did not find the right thing. Then we found an even better research tool: the yellow pages. There are many listings under "wood turner" in San Francisco. We went to the first one that caught our eye, Gail Redman Woodturning on 14th St., across from Rainbow. It is a small shop with about 3 guys making round things on lathes. Sawdust all around. The

more efficient, reducing the space needed for the shop floor. As a result of these and other changes, many printing firms can now locate in smaller industrial structures or even office buildings. However, other firms say they continue to need traditional industrial buildings because of their ongoing investment in new types of presses, scanners, image-setters, and other equipment. It should be noted that changes in how an industry functions (adaptation of technology by printers etc. mentioned earlier) does not mean that these industries are now necessarily compatible with residential neighborhoods. Many still receive deliveries or distribute goods themselves, which generate truck traffic and noise.

Distribution

Distribution industries-wholesale, trucking, warehousing, transportation, and the like—followed a pattern of decentralization similar to manufacturing after World War II. As firms sought cheaper land to build large, single-story facilities they naturally looked to the suburbs. This trend was exacerbated by the decline of the Port of San Francisco. With significantly less cargo moving across San Francisco piers, fewer trucks and distribution facilities were needed. Nevertheless, the Port still maintains cargo operations, and so a number of related businesses remain in San Francisco.⁵

Today, large-scale warehousing and distribution facilities have not only left the central city, they have for the most part abandoned the core of the metropolitan area: Tracy and other parts of the Central Valley are now the locations of choice for the largest distribution centers. However, a significant number of smaller distribution businesses remain in San Francisco. In general, these are local-serving enterprises that value proximity to their customers. Not surprisingly due to the nature of the industry, wholesale trade businesses in San Francisco have strong linkages to other sectors of the City's economy.⁶

Distribution businesses provide important support services to other sectors of the City's economy. Printing firms need paper, auto repair shops need a ready supply of parts, and metal fabricators/designers

⁵A recent consultant report estimates a modest increase in cargo throughput as of 2010. *Maritime Cargo and Industrial Land Use Study* prepared for Port of San Francisco by Martin Associates and Jordan Woodman Dobson.

⁶According to the San Francisco input-output model and interviews conducted with business owners, these businesses are located in San Francisco to serve the local, rather than the regional economy.

wall is full of balusters, one of them quite like ours. We ordered 20 of them. Next step, pick of the bathroom sinks & faucets at Floorcraft on Bayshore, so that we can draw a template for the marble counter. The marble will also be very nice, made by a local firm, and it will probably be ready when we want it. Then to Victoriana, where they have lots of great wood & plaster things for old houses: brackets, moldings, etc. We are looking to match the bannister that runs above the balusters. They do not have it, but they have lots of catalogues from other places that they share with us. Then we go to a plywood yard to get a sheet of thin plywood for the template. In their office they have a framed photo of the Bay Bridge under construction. Several of these places have had the same photo on their wall. Local pride. We tie the plywood to the top of the car. L says that it will be OK as long as we "keep below 80" mph. The salesman says that that is his line.

On to Beronio, the classiest and most expensive local lumber yard. Acres of neatly stacked wood of all types. Also trims, moldings, baseboards, etc. They have a bannister much like the one we want. Then around the corner to Robert Yick restaurant supply on Bayshore to talk about the stove and its installation. We go to his office and talk about stoves and stainless steel, which is his medium. This is actually a manufacturing firm. They make custom kitchen stuff for restaurants and homes. They have the kind of rating that allows them to do commercial kitchen stuff, which is a big advantage, code-wise. There was lots of stuff for Chinese restaurants, counters/stoves with holes for woks. They are doing the new kitchen for Fleur de Lys, which had a fire a while back. He said that business from restaurants is down, but that he is still getting residential work. Lots of guys working slowly and carefully with big machines and lots of stainless steel. (measuring twice and cutting once.) —As recounted by a SF resident

need sheet metal and other supplies. One wholesale supplier of auto body parts maintains a number of distribution centers throughout the region, including one in the Central Waterfront. Interviews explained this dispersed distribution system as ideal for maintaining proximity to customers. The business had no interest in relocating and feared that displacement would result in a serious disruption to the business as well as a loss of customers. Not only PDR businesses need efficient, reliable, and timely delivery of physical goods, which close proximity to distribution centers helps provide; hotels need linens and laundry service, restaurants require access to food wholesalers and equipment suppliers, and offices need paper and other supplies. A general discussion of these kinds of linkages is found in the section on PDR's role in the San Francisco economy.

If forced to pay more for real estate to remain in the City, most distribution businesses would be able to pass on some increased costs to their customers. However, it is very unlikely that they could ever compete for space with other uses. Thus, if forced to move, the daily activities of many enterprises would be complicated; many sectors—including San Francisco's economic mainstays such as tourism-related businesses and downtown office firms—would experience more frequent disruptions in their supply chains.

Repair

Repair represents a sector of activities that work intimately with both production and distribution businesses. In some instances, such as is the case of a woodworker or cabinetmaker, the repair of old or broken items is part of the production services onsite. Repair businesses often require larger spaces with open yards for storage. The machinery used for operation of the business is often noisy and therefore such businesses prefer to be removed from residential uses.

Furniture repair, car repair, truck repair, the repair of heavy machinery, and the repair of small products from watches to bicycles, all occur in San Francisco. Firms that provide these services support the needs of local and regional residents as well as perpetuate the operation of local and regional production and distribution firms. Repair firms are an obvious example of the synergy and symbiotic nature of the industrial sector in San Francisco. Specialized repair shops often contribute to the functioning of a cluster of businesses in one geographic area. Multiple industrial firms depend on the proximity of a repair business in order to function and thrive in their respective trades.

Non-Industrial Uses in the Industrial Lands

Research and Development-Biotech

San Francisco's economy has become increasingly tied to certain "new economy" sectors that have grown out of new technologies, such as multimedia. Although some of these industries share many of the features of PDR, there are compelling reasons not to include them in this classification. The increasing importance of knowledge-based industries in San Francisco's economy, and the differences between those industries and existing land use categories, suggests that the City should consider treating research and development (R&D) space as a separate category.

Most R&D firms occupy an intermediate place between PDR and office use. The need for special features (such as high ceilings) and incompatibility with housing give them a resemblance to PDR uses. The attraction to an urban location, relatively high employment densities, a concentration of high-end jobs, and a greater ability to pay link them to office uses. Some industries, like multimedia, quickly evolve to a point where they resemble office uses more than PDR, but many R&D industries are characterized by a need for flexible space that cannot be provided by office buildings. Some, such as biotech, include a continuum of activities that range from firms closely resembling office uses to manufacturing facilities and many combinations in between.

There is currently little or no commercial biotech in San Francisco, despite the prominence of the University of California at San Francisco. The firms such as Genentech that have been "spun off" from UCSF are located elsewhere in the region, notably in South San Francisco. San Francisco currently has some existing building stock that may be suited for certain biotech users, and a number of property owners in the South of Market are currently attempting to lure such users. However, real estate brokers who work with biotech firms claim that in general these firms want new space, and it remains to be seen whether or not existing spaces will be viable in the marketplace. The long-range plans for Mission Bay and Hunters Point Shipyard include a significant allocation of space for R&D uses.

4

production, distribution, repair's role in san francisco's economy

Production/Distribution/Repair is an important part of the City's modern, post-industrial economy for a number of reasons. PDR activities contribute to the economic diversity and stability of San Francisco. PDR businesses are significant for the above average wages they offer and for the support they provide to the City's tourist industry and downtown financial core. Given the integral role of PDR firms in San Francisco's economy, these businesses can be expected to continue to constitute an important part of the City's job base and therefore space must be made available for them; they are part of a balanced land use system. The question is not whether PDR activities are important for the City, but rather what kind and how much is important; where and how these businesses are accommodated; and to what extent they require exclusively industrially zoned land to function.

Support for Other Economic Sectors-Linkages

Activities in one sector of the economy rely upon a network of other businesses in order to work efficiently and effectively. The connections between sectors are part of what makes a place dynamic. Many PDR industries provide support for downtown businesses and other key economic sectors of San

PDR Linkages to Key Sectors

INDUSTRY TYPE	Financial Sector	Residential Sector	Tourist/ Restaurant Sector	PDR Sector
Printing & Publishing				
Other Printing & Binding				
Wholesale Printing & Pub				
Photography Services				
Graphic Design, Int.Design & Signs				
Radio, T.V. Stations & Comm Svcs				
Garment Manufacturing				
Other Apparel				
Wholesale Apparel				
Transportation & Delivery Svcs				
Taxi/Limo/Shuttle				
Trucking, Freight, &Packing				
Parcel Shipping &Courier Svcs				
Utilities				
Small Scale Manufacturing & Wholesale				
Public Warehousing & Storage				
Sound Recording/Film Prod				
Wholesale Flowers				
Catering & Food Processing				
Food & Beverage Wholesale & Distribution				
Building Construction & Maintenance				
Auto Wrecking &Scrap Storage Yards				
Concrete Works				
Wholesale Construction & Distribution				
Furniture Mfg & Rpr.Wood Work				
Furniture Wholesale & Showrooms				
Appliance Repair				
Interior, Household & Appliance Wholeseller				
Large Scale Manufacturing & Wholesale				
Parking, Rental & Towing				
Theaters, Art Spaces				
Wholesale Auto Parts				
Auto Repair				
Export/Import Trading Companies				
Jewelry Wholesale Mfg				
Landscaping/Horticulture & Animal Svcs				
Chemicals/Plastics/Leather Goods mfg				
Waste Management				

Francisco. Restaurant and hotel suppliers, printers, and construction firms have strong linkages to other city industries and value proximity to their customers. The growth in PDR employment from 1997 to 2001—precisely the period when the City's economy was expanding most rapidly—is in part a reflection of these linkages.

A study in Boston found that nine separate businesses collectively employing over 200 workers are involved in moving a lobster from the seabed to its final destination over a bed of rice in a restaurant. All of these businesses would be classified as PDR in San Francisco and exist in San Francisco: maritime activities, including the fishing company itself, boat storage, and boat maintenance; wholesalers of bait, ice, fuel, and seafood; truck repair services; and companies involved in sales and service of refrigeration equipment.⁷

Some PDR industries provide essential or desirable services, such as auto repair. Auto repair shops in turn rely on suppliers and wholesalers that value proximity to their customers. If City residents value services such as auto repair within the City limits, space must be provided both for those services and for some of their suppliers. Designers that fabricate products on site provide an incomparable service to the interior design, architecture, and product design industries of San Francisco. The proximity of services that are part of the network required to manufacture a product facilitates a cohesive and streamlined economic system.

Linkages can include the purchase of goods or services produced within one industry by other industries. Such linkages are quantified for a given year and geography in input-output tables. The relationships between different sectors vary due to differences in production techniques within a given time period, from place to place (e.g., more capital-intensive or technology-intensive production), and in the scale of the input-output table. Naturally, a given industry at the national scale can purchase a greater percentage of its inputs from "local" industries (i.e. within the United States) than the same industry at the state, regional, or local scale, which must "import" inputs from outside its geography.

⁷Boston's Backstreet Program, Boston, Massachusetts. 2002

Input/Output Table

Business Linkages in San Francisco: Percentage of Total Inputs Purchased from Selected PDR Industries

Selling Industry	Purchasing Industry			
	Visitor Services		FIRE	
	Eating/ Drinking	Hotels	Finance	Real Estate
TOTAL PDR	45%	30%	11%	31%
Wholesale Trade	10%	2%	--	--
Food Processing	18.50%	1%	--	--
Transportation	2.50%	1%	3%	--
Printing/Publishing	--	2%	1.50%	2%
Construction, Maintenance, Repair	7%	19%	3%	Most of the 31% above
Other PDR	7%	5%	3.50%	--

Source: 1993 IMPLAN San Francisco Input-Output Table and Strategic Economics

Note: The input-output table consists of categories not comparable to employment or wage data given elsewhere in this report.

The input/output table describes existing inter-industry relationships without a consideration of whether those relationships must be local. That is, the fact that the eating/drinking sector purchases 10 percent of its inputs from wholesale trade firms in San Francisco does not necessarily mean that there is a need for proximity or that the industry would suffer if those suppliers were not located in San Francisco. However, the significant relationship between a number of PDR industries in San Francisco and key City sectors suggests that proximity is an important consideration for such support industries. Even a white collar, office-based sector such as finance purchases 11 percent of its inputs from PDR industries in San Francisco. Other sectors, particularly those connected to entertainment and visitor services such as eating and drinking and hotels, exhibit an even stronger purchasing relationship to the PDR sectors. These connections clearly illustrate the importance of small and mid-sized PDR businesses to the health and functionality of San Francisco.

Wages

With changes in the national, regional, and local economy, there has been increasing bifurcation of the labor market into highly paid jobs requiring high skill levels and poorly paid jobs with low skill requirements. This has an impact on the population diversity of the City, since many workers in the latter job categories find it increasingly difficult to afford to live in San Francisco. PDR jobs on the whole pay better than jobs in such service businesses as restaurants and hotels.

Average Wages in Selected Industries in San Francisco⁸

Industries	Employment	Hourly
All Industries	507,355	\$22.10
PDR Industries	110,289	\$21.19
<i>Production</i>	49,668	\$21.22
<i>Distribution</i>	36,475	\$20.63
<i>Repair</i>	6,159	\$16.79
<i>OTHER PDR</i>	17,988	\$23.72
SIC Divisions and Selected 2-digit Industries		
Construction (Division C)	18,203	\$24.12
Manufacturing (Division D)	31,464	\$19.54
<i>Food and Kindred Products (SIC 20)</i>	2,915	\$17.21
<i>Textile Mill Products (SIC 22)</i>	895	\$11.07
<i>Apparel (SIC 23)</i>	10,289	\$14.91
<i>Printing & Publishing (SIC 27)</i>	8,792	\$25.51
Transportation and Public Utilities (Division E)	29,415	\$21.74
Wholesale Trade (Division F)	20,257	\$21.94
Retail Trade (Division G)	92,822	\$13.92
<i>Furniture and Home Furnishings (SIC 57)</i>	5,272	\$11.50
<i>Eating and Drinking (SIC 58)</i>	42,802	\$11.50
Finance, Insurance, and Real Estate (Division H)	75,526	\$28.25
Services (Division I)	237,968	\$23.60
<i>Hotels, etc.</i>	19,031	\$13.99
Selected 3-Digit PDR Industries:		
Auto Repair (SIC 753)	2,043	\$19.82
Film and Video Production (SIC 731)	1,470	\$26.14
Graphic Design/Commercial Photography (Included in SIC 733)	4,962	\$21.33

See Sources next page

In 2001, PDR jobs paid over \$21.00 per hour, on average, \$1.00 per hour below the citywide average but significantly higher than hotels (\$14.00 per hour) and eating and drinking establishments (\$11.50 per hour). Some PDR industries, such as construction and printing, pay more than the citywide average.

The California Budget Project defined a living wage for families in the San Francisco Bay Area in 1999 as follows :

- Single-parent family: \$21.24 per hour.
- Two-parent family (one working): \$17.56 per hour.
- Two working parent family: \$12.92 per hour.

This means that the average wage in PDR industries constitutes a living wage for a single-parent family, whereas the average wage in many other industries does not. Providing a living wage for families or single residents in San Francisco is a significant asset to a job base and

⁸Source: California Employment Development Department, Strategic Economics.
Note: Data do not include public administration (SIC Division J).

Wages are based on the following data sets:

- 2001 wage data for SOC (standard occupational categories) in the San Francisco MSA (San Francisco, San Mateo, and Marin counties)
- 2001 San Francisco employment data at the 3-digit SIC classification by OES occupational category
- 2000 employment data for San Francisco.

These three data sets were used to assess total employment at the 3-digit SIC classification by occupation/wage category and to calculate average wages in each 3-digit SIC classification as a weighted average based on employment and wages.

Average wages

The following changes, estimates, and assumptions were made:

- Since the base data contained two different types of occupational codes, SOC and OES, a correspondence was created. There is not always a one-to-one match between the two codes.
- For certain SOC categories—primarily the teaching professions, EDD provides only annual wage data because hourly data are difficult to calculate. In these cases, hourly wages were estimated by dividing the annual wages by the same number of hours used
- A small number of occupations have a substantial portion of workers earning more than \$70.01 per hour (the top step in the 2000 OES survey). In these cases, EDD does not provide mean hourly and annual wages because they cannot be reliably calculated.
- After matching OES codes to SOC codes, there were some OES categories that had no wage information. Wages for these categories were estimated on the basis of similar job categories. Most of these jobs (e.g., nuclear engineers, oil pumpers, millwrights)
- For a variety of reasons, it was not possible to calculate average wages for SIC classification 9—public employment. Therefore, the overall citywide average wage does not include public sector employees.

The wage figures reported herein are based on citywide employment numbers. Businesses falling into PDR categories but located downtown were not excluded from this analysis. In theory, this could lead to an overstatement of wages.

Wages for Low Skill Workers in Selected Industries

Training Required	Percent of Jobs			Hourly Wage		
	Hospitality	Printing	Trucking/ Warehousing	Hospitality	Printing	Trucking/ Warehousing
Work Experience	6.20%	2.80%	3.00%	\$21.53	\$23.85	\$24.90
Long-Term On-The-Job Training	10.30%	7.50%	2.70%	\$13.84	\$22.31	\$19.80
Moderate-Term On-The-Job Training	2.80%	24.40%	9.10%	\$16.62	\$21.46	\$18.70
Short-Term On-The-Job Training	75.50%	25.70%	72.70%	\$9.49	\$13.57	\$14.03

Source: California Economic Development Department, Strategic Economics.

the City overall. Protecting entry-level jobs as well as specialized blue-collar jobs therefore provides stability for the City.

Since 1970, income disparities have increased, a fact well documented. One study has found that in California these increases have been even greater.⁹ In 1969, the 75th percentile of the population in California had 2.3 times the income of the 25th percentile. In 1989 the ratio had increased to almost 3.0, and in 1997, the ratio was 3.3. In 1969, households at the 90th percentile in California had 5.3 times the income of households at the 10th percentile. In 1989 the ratio was 8.7 and in 1997 it had increased to 10.1. It is important, therefore, to

***PDR Wages by Educational Level**

Wages	Education					Total
	High School	Vocational Training	2 Year College	4 Year College	Beyond College	
\$6.75 or less	0.3%	0.3%	0.0%	0.0%	0.0%	1%
\$6.76 - 10	9.3%	1.5%	0.8%	1.5%	0.0%	13%
\$11 - 15	21.7%	2.8%	5.5%	4.3%	1.3%	36%
\$16 - 20	16.6%	3.3%	5.5%	4.3%	1.5%	31%
\$21 - 25	5.8%	2.3%	2.3%	1.0%	0.5%	12%
\$26 +	3.3%	1.5%	1.8%	0.8%	0.5%	8%
Total	56.9%	11.6%	15.9%	11.8%	3.8%	100%

** Of surveys responding*

San Francisco Planning Department PDR survey

⁹California Rising Income Inequality: Causes and Concerns. Deborah Reed. Public Policy Institute California. 1999.

retain an employment base that provides decent wages; PDR jobs help to create such a base.

Job Skill Levels

PDR industries do not just pay higher overall wages than jobs in other sectors, particularly the services sector; they pay higher wages for workers with the lowest levels of skills and education, as shown in the table below. For the lowest skill level defined by the California Employment Development Department (short-term on the job training) PDR jobs pay \$13.00 per hour, compared to less than \$12.00 in the economy overall. A similar difference is visible in all the lower skill categories in these industries.

The differences are more visible when specific industries are compared, as shown in Table 2. Most of the jobs in San Francisco's hospitality industry (hotels and restaurants) are in the lowest skill category and pay \$9.49 per hour, near the bottom of the City's wage scale. In contrast, jobs in that skill category in the printing and trucking/warehousing industries pay roughly \$14.00 per hour. Although the printing industry has a much higher percentage of its jobs in higher skill categories (and therefore more highly paid but requiring more training), the trucking and warehousing industry is comparable to hospitality in its overall skill requirements yet pays higher wages in all.

PDR industries therefore provide relatively well-paid jobs for workers with low levels of skills and training and therefore help to mitigate rising income inequality. They also provide jobs that require valuable skill sets often learned on the jobsite. The skills learned in the production and repair sectors are very valuable and travel with that employee over the course of employment. With experience comes an increase in salary and advancement. Craft, dexterity, and knowledge converge to yield proficient artisans much sought after in the workplace. If these jobs are lost, it is reasonable to assume that the bifurcation of San Francisco's job market—and therefore income disparities—will increase. Production/Distribution/Repair jobs, as mentioned earlier, provide about 67,000 citywide. Most of these are found on land zoned for industrial uses. Providing jobs for a variety of skill sets at a competitive wage is an invaluable asset to the population and the diversity of the City's economy.

According to the Planning Department business database, PDR businesses that remained in the Eastern Neighborhoods between 1998 and 2002 grew by 2100 jobs.

Economic Diversity and Stability

PDR activities contribute to the stability of the City's economic base, partly because they increase the diversity of economic activities here. In fact, many observers attribute the health of the Bay Area's regional economy, as compared to Silicon Valley's over the past year and a half, to our economy's greater diversity.

A comparison of vacancy rates provides an example of PDR's relative stability. PDR properties have shown greater stability than office with smaller increases in rent and sales prices. The vacancy rates remained extremely low (under 3%) at a time when other uses were desperate for tenants. The office market in San Francisco now has 6 million square feet of sublease space available, a 21 percent vacancy rate (as of the end of the first quarter of 2002), and rents at 57 percent below their peak. This represents a much more severe downturn than during the recession a decade ago, and a much worse situation than in the City's PDR real estate market. (Silicon Valley Business Journal, Grubb and Ellis, broker interviews). A wide variety of economic activities helps to ensure that in downturns not all of them will suffer. As the next sections will discuss, the availability of land and buildings to support PDR jobs is what allows San Francisco to adapt to changing economic conditions. This flexibility and adaptability is closely tied to preserving distinct industrial building types and is an important issue for the City to consider when making land use policy decisions.

5

what production, distribution, repair requires to function in the san francisco economy

At the very base level, Production/Distribution/Repair needs land, space, and a labor force to survive.

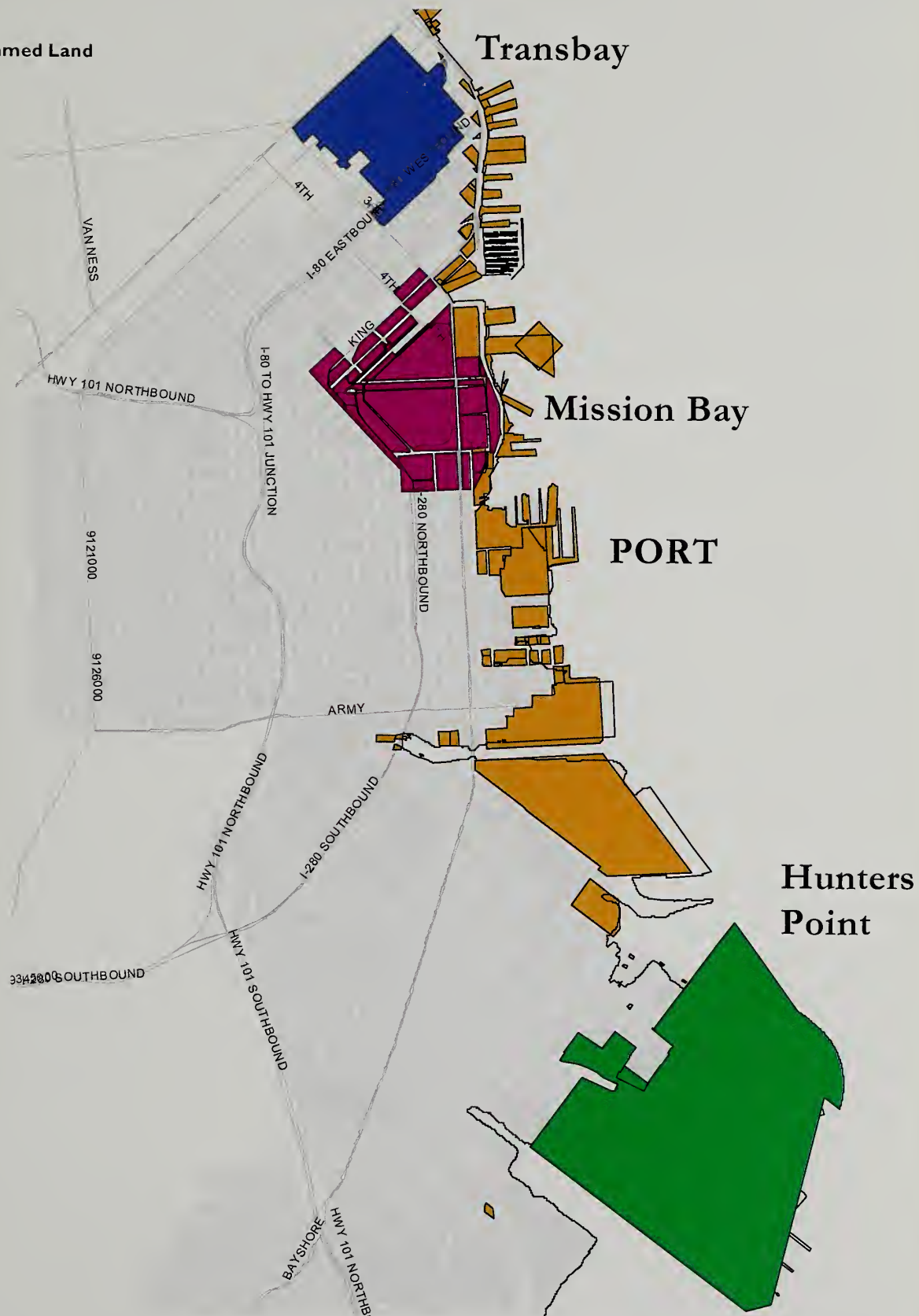
Land

Increasingly, San Francisco has been adapting its industrial land to other uses, especially housing. Currently, only 14 percent of San Francisco's industrial land, about 3254 acres, is zoned industrial. Of this land, half has been either programmed for major redevelopment as part of Transbay, Mission Bay, and Hunters Point projects, or is owned by the PORT. Of the remaining half--1654 acres--650 acres has been set aside as part of a mixed-use housing encouragement area. More industrial land will be re-appropriated as part of Central Waterfront, Market/Octavia, and Schlage Lock Visitation Valley plans.

Port of San Francisco

In its 1997 Waterfront Land Use Plan, the Port identified three locations in the Southern Waterfront subarea as "Mixed Use Opportunity Areas" available for non-maritime development. Two of those sites are subject to public trust use restrictions under the Burton Act: 1) the 14 acre Pier 70 Opportunity Site at 20th and Illinois Streets; and 2) the 10 acre Cargo Way

Location of Programmed Land



Opportunity Site located upland and south of Pier 90 and 92, between Third Street and Heron's Head Park. The mix of long-term uses developed on either of these two sites must, as a whole, be determined to be consistent with the Public Trust Doctrine, but may include incidental amounts of non-trust uses, such as PDR. Unfortunately, there is no clear definition provided by the State Lands Commission for what constitutes "incidental"; this has been determined on a case-by-case basis because individual projects differ quite dramatically. However, for planning purposes, 10% of land area for non-trust uses may provide an order of magnitude sense as to what scale of non-trust use could be considered acceptable.

In the case of the Pier 70 opportunity area, the Port requires new development to include rehabilitation of historic structures and creation of a substantial amount of public access and open space, in addition to remediating the site. The cost of these requirements would likely be prohibitive for PDR uses.

The third Southern Waterfront Opportunity Area identified in the Port's Waterfront Plan, the 27 acre Western Pacific Opportunity Area immediately north of the Pier 80 cargo terminal, is one of the few parcels owned by the Port that is not subject to the public trust use restrictions. Seventeen acres has been approved for development of the MUNI Metro East light rail repair and storage facility. In addition, MUNI has first right of refusal to use the remaining 10 acres.

Although not identified as an Opportunity Area in its Plan, the Port has identified a 31 acre "Pier 90-94 Backlands" site bounded by Pier 92 and Pier 94-96 cargo terminal, Islais Creek to the north, and Cargo Way to the south. This site is subject to the trust and, given its strategic location adjacent to the Port's cargo facilities is the most important area within which to provide expansion options for maritime and maritime support uses. This backlands area will be the subject of further community planning to determine how future development can also address community desires to expand public access, environmental improvements and to beautify the area.

Hunters Point Shipyard

Numerous obstacles make the relocation of PDR uses to the Hunters Point Shipyard infeasible or undesirable:

- o Location-geographic isolation and lack of transit and regional road access. First and foremost, the Shipyard is relatively isolated from both freeway access and mass transit services. This isolation is a problem for efficient distribution of goods, access to workers, and the clustering necessary for many PDR activities.
- o 10 to 20 year time frame and phasing of Shipyard build-out. The Preliminary Development Concept (1999) for the Shipyard, prepared by Lennar/BVHP, the developer, reveals that the type of flexible industrial spaces required by PDR uses will be scant throughout the first two phases, projected through the year 2010. Phase I (through 2005) anticipates about 27,000 new square feet of new R&D space available for occupancy. This space will target small film and video firms new to San Francisco. Phase II (through 2010) projects the completion of 213,000 square feet of new R&D space, and 175,000 square feet of industrial space. The R&D space is intended for high-end multi-media and film companies compatible in a mixed-use environment.
- o Availability of industrial land is contingent upon the Navy completing the first phase of its environmental clean-up on schedule and no sooner than 2006. The Industrial/R&D space coming on-line in Phases I & II will support just under 2,000 jobs. Most of these Shipyard jobs are slated for higher-end production/MIPS uses compatible with residential mixed-use environments. Lennar/BVHP has stated that they intend to change the perception and reputation of Hunter's Point, distancing it from its industrial past. Absorbing displaced PDR businesses would likely conflict with this goal. Ultimately, by 2025, the Shipyard is projected to contain about 680,000 square feet of space devoted to "Industrial Use," including a full spectrum of PDR; and about 995,000 square feet of R&D-tailored primarily to higher-end office and biotech uses.
- o Lack of Infrastructure-The Shipyard currently lacks the infrastructure (e.g. roads, telecommunications, waste disposal, buildings) to support PDR businesses. According to the long-range plan for the area, such preparation will ensue no earlier than 2010.

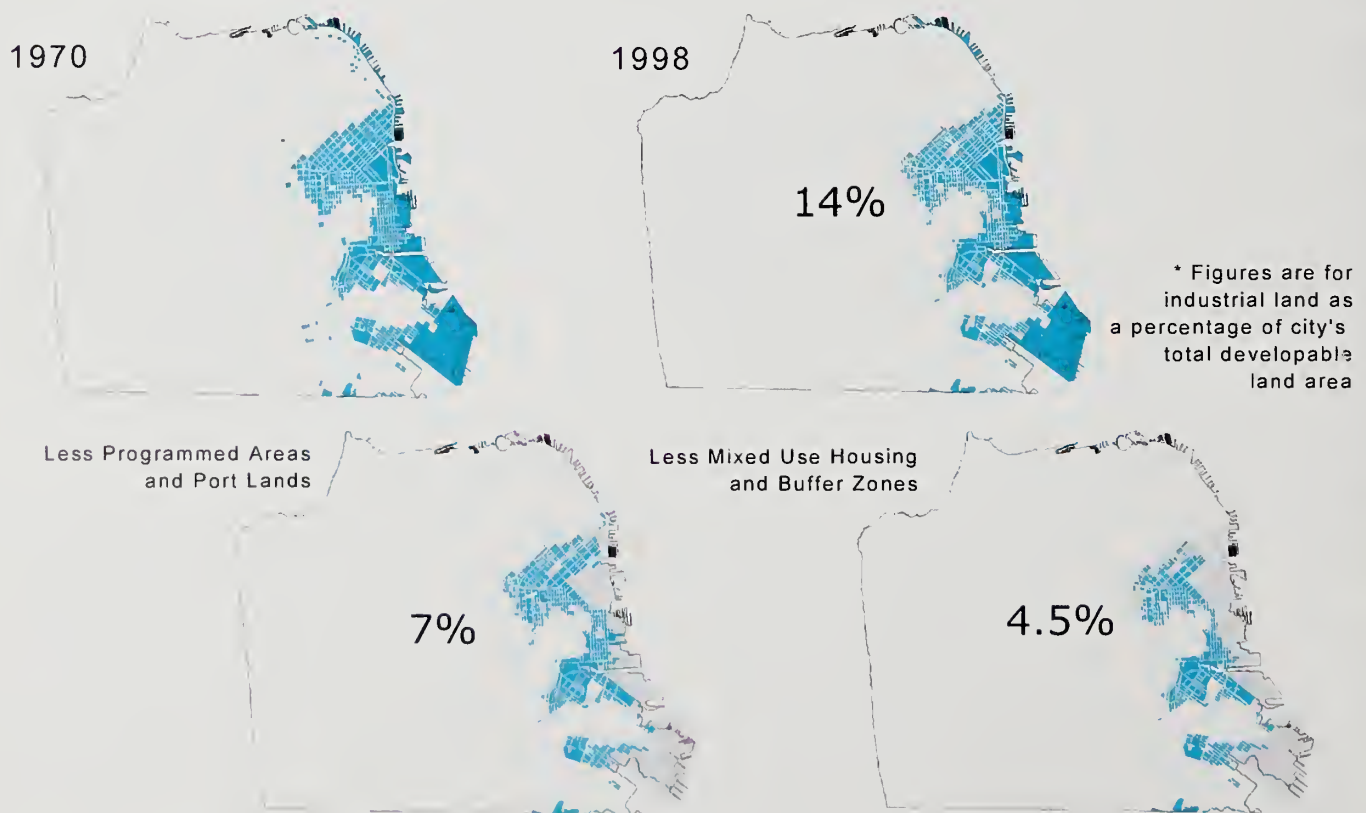
Mission Bay

The Mission Bay project includes more than 300 acres of land surrounding China Basin Channel. Programmed as a mixed-use development, the project will include the new UCSF campus, up to 6,000 units of market-rate and affordable housing, 850,000 square feet of retail space, public open space, a hotel, and 6 million square feet of commercial space (including office, retail, R&D/Biotech). Given the cost of this research space, it is unlikely that most PDR firms will show much interest. The R&D/flex buildings will most likely serve medical-biotechnology research oriented firms that can afford to pay more for space.

The Remaining Industrial Land

Some of the remaining 1654 acres of industrially zoned land is earmarked as suitable for mixed-use development in the Central Waterfront Better Neighborhood and Market/Octavia Better Neighborhood Specific Plans, and the Schlage Lock-Visitation Valley draft concept

Industrial Lands Shrinkage, 1970-1999



Land for Industrial Use In San Francisco
1970 - 1999

San Francisco Planning Department
October 2001

PDR Industries Requiring More Space

Type of Industry	# of Business	Total Employment
Building Construction & Maintenance	16	79
Food & Beverage Wholesale & Distribution	7	36
Parking, Rental & Towing	5	19
Large Scale Manufacturing & Wholesale	7	38
Taxi/Limo/Shuttle	2	58
Trucking, Freight, & Packing	4	14
Wholesale Construction & Distribution	1	3
Transportation & Delivery Svcs	3	27
Export/Import Trading Companies	1	3
Auto Wrecking & Scrap Storage Yards	1	3
TOTAL	47	280

San Francisco Planning Department PDR survey

plan. Current policies and procedures established under the 1999 interim zoning controls guiding development on industrially zoned land set aside about 650 acres as a mixed-use housing development encouragement zone. About 1000 acres of existing industrially zoned land remains, then, somewhat prioritized for industrial uses. Contingent upon clean-ups of surplus Port land as well as of land in the former Hunters Point Naval Shipyard, additional land for industrial use may become available within the next 25 years.

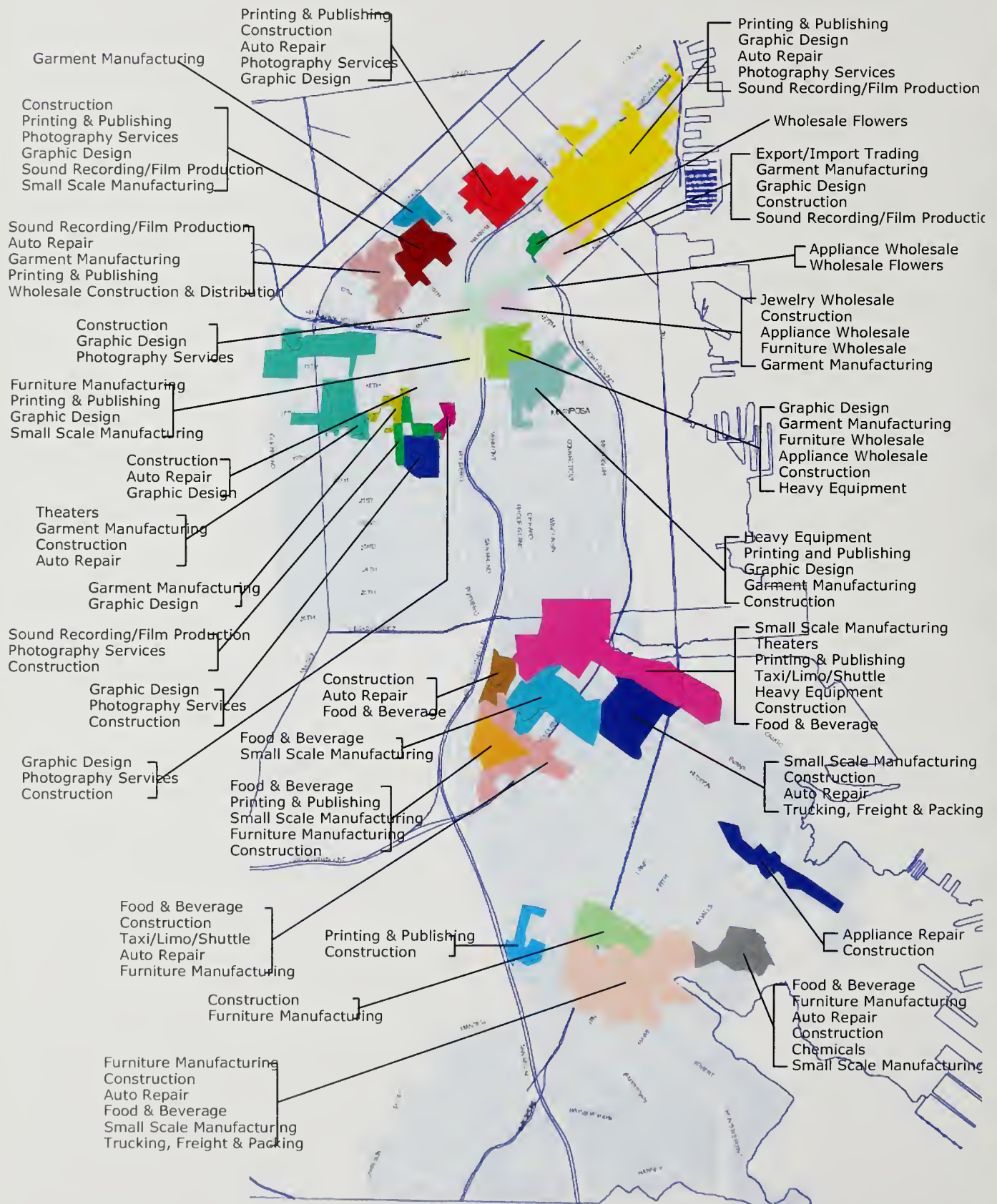
PDR Survey Fact: Approximately 52% (237 of 454) of respondents stated that freeway access was important to their business; 41% (188 of 454) of respondents indicated that BART was important for their employees.

In addition to serving the space needs of PDR businesses, this land currently also serves a number of existing residential and mixed uses including office and retail. Ideally these lands should be set aside to serve PDR businesses interested in locating away from residential uses or at least to locate some of the more compatible industrial uses. There is not a great deal of flexibility of movement within the industrially zoned lands, and PDR businesses cannot easily or realistically relocate from one industrially zoned area of San Francisco to another. Vacancy rates are low on industrially zoned Land.

Different PDR activities need different amounts of open land. Based on the needs of various PDR sectors, it appears that almost half of these PDR businesses require the open space or flexible space available on such an underdeveloped lot. These include activities such as trucking companies, or construction supply companies that require space for

Section Five: What Production, Distribution, Repair Requires to Function in the San Francisco Economy

PDR Clusters on Industrially Zoned Land



parking trucks, loading and unloading materials, and storage. These businesses, then, take advantage of the layout of their parcel, making use of the extra open space to function efficiently and to stay in business. Based on the Planning Department's Soft Site Analysis study, 125 lots on industrially zoned land (excluding Central Waterfront and pre-programmed land) are built at 5 percent or less of their maximum square foot buildout. About 375 businesses (D&B business database 2001) operate on these underdeveloped parcels, of which about 109 businesses are classified as PDR.

A woman-owned mechanical contracting company located in the Mission was looking for a building in San Francisco to purchase for its expanding business. The company eventually found a former warehouse in SoMa that had been used for two years prior as a dot-com office space. Fortunately, the tenant improvements were minor, and the roll-up door and loading area were left relatively intact. The company relocated to the SoMa and the owner is now confident that her business can remain in San Francisco. It will sustain the pressures within its own industry but at least not the threat of rent increases beyond its scale of affordability.

The remainder of the PDR businesses found on underdeveloped parcels include activities such as printing, graphic design, photography, furniture showrooms, and sound recording and film producing. These sites have the potential for a greater intensity of buildings and uses. In addition, there are about 270 non-PDR businesses located on underdeveloped lots on this industrially zoned land. These businesses fall mostly under the categories of retail and small office.

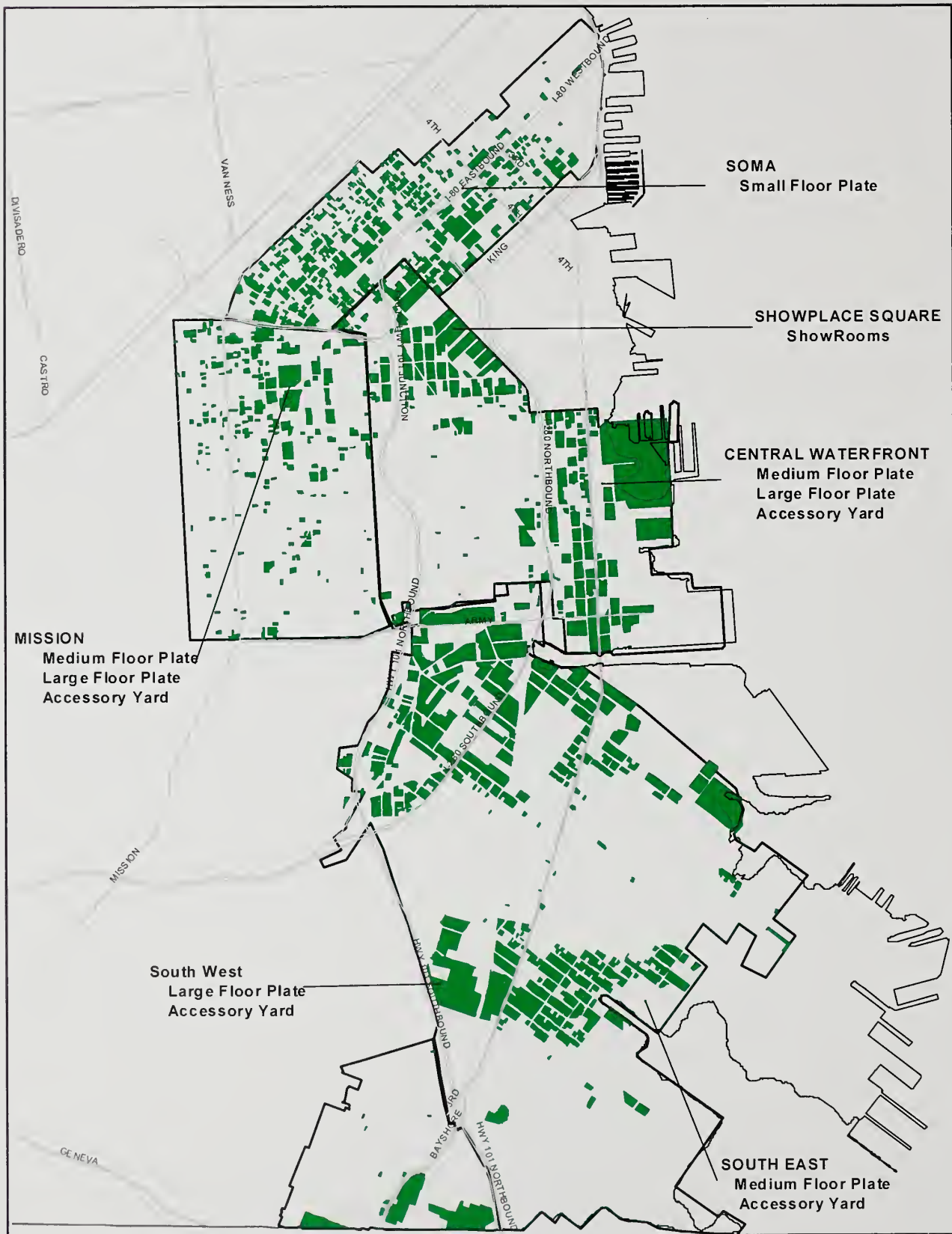
PDR businesses often locate in close proximity to one another, creating clusters of related activities. They find that clustering facilitates the exchange of information, eases access to workers with specialized skills, and generally encourages stronger ties among businesses. Clustering also makes it easier to share resources, technology, and services. Clusters can result in lower operational costs and more efficient production. Displacement of one or more firms in a cluster can disrupt and break up long-standing and successful PDR districts.

In addition to serving the space needs of PDR businesses, this land currently also contains a number of residential and mixed uses, including office and retail. Furthermore, there is not a great deal of room to move within the industrially zoned lands, and PDR businesses cannot easily or realistically relocate from one industrially zoned area of San Francisco to another. Vacancy rates are low on industrially zoned land. Thus, it is important to preserve the bulk of the remaining industrial land for PDR and other industrial uses.

Buildings

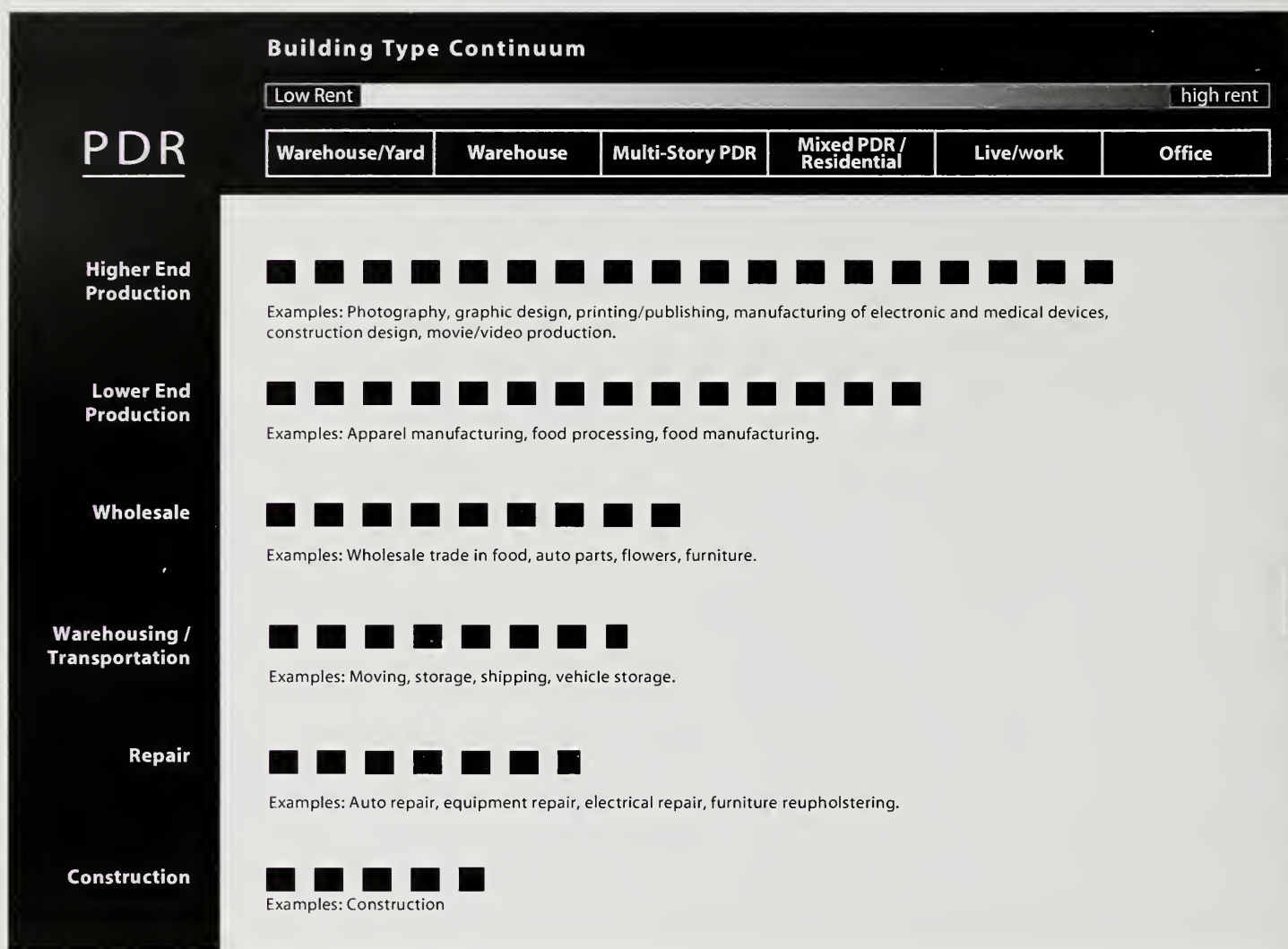
Building Types

Perhaps the most important characteristic of the buildings in which most PDR industries are located is their flexibility. Many of these building types can and do accommodate a variety of very different



Building Type Occupied by Industry Type

Industry Type	Coml Bldgs	Ind Bldg	Office bldg
Printing & Publishing		X	X
Other Printing & Binding		X	X
Wholesale Printing & Pub		X	
Photography Services	X	X	X
Graphic Design, Int.Design & Signs	X	X	X
Radio, T.V. Stations & Comm Svcs			X
Garment Manufacturing		X	
Other Apparel	X	X	
Wholesale Apparel	X	X	X
Transportation & Delivery Svcs		X	X
Taxi/Limo/Shuttle		X	
Trucking, Freight, &Packing		X	X
Parcel Shipping &Courier Svcs		X	
Public Warehousing & Storage		X	
Sound Recording/Film Prod		X	X
Wholesale Flowers	X		
Catering & Food Processing		X	
Food & Beverage Wholesale & Distribution		X	
Building Construction & Maintenance	X	X	X
Wholesale Construction & Distribution		X	
Furniture Mfg & Rpr.Wood Work		X	X
Furniture Wholesale & Showrooms	X	X	X
Appliance Repair		X	
Interior, Household & Appliance Wholeseller		X	
Large & Heavy Equipment Wholesellers		X	X
Auto & Boat Repair, Parking& Renting	X	X	
Wholesale Auto Parts		X	
Theaters/Sports Facilities/Gyms & other Rec		X	X
Export/Import Trading Companies	X	X	X
Jewelry Wholesale Mfg	X	X	X
Landscaping/Horticulture & Animal Svcs		X	
Chemicals/Plastics/Leather Goods mfg		X	
Waste Management		X	



users, either simultaneously or at different points in time. They often serve an incubator role, providing space for small firms and even new industries that may have undefined or rapidly changing needs. Many PDR buildings offer features such as high ceilings, large loading docks, and ground floor access that are not available in office and most commercial buildings.

These buildings are also well-suited for companies whose needs change over time, such as those with shifting requirements for manufacturing, warehouse, R&D, and office space. The large floor plates of many PDR buildings are important for allowing flexibility and dynamism by allowing spaces to be divided up in many different ways. This stands in

**Approximate Rental Rates by Sector
(Per Square Foot Per Month)**

User Type	Approximate Rent
Office Uses (MIPS)	\$4.00
Higher-end Production Firms	\$1.00-\$1.50
Lower-end Production Firms	\$0.50-\$1.00
Retail	\$1.00-\$2.00
Wholesale	\$0.40-\$0.80
Transportation	\$0.20-\$0.50
Construction	\$0.20-\$0.50

Source: Telephone interviews with brokers and business owners, 2001.

marked contrast to office or residential buildings, which are far less flexible and which are built to serve a narrow range of users.

Distribution firms must be in specific building types. Most warehousing and distribution operations, including for instance wholesaling, can only operate out of single-story buildings with loading docks for the simple reason that the effort involved in moving goods vertically would hamstring their operations. Distribution activities are often incompatible with residential development because trucks play an integral role in their operations. Although some distribution spaces are not modernized, they still serve the needs of small-scale local companies. Real estate brokers and business owners say that remaining in inadequate buildings that are in proximity to customers is preferable to moving into higher quality buildings outside of San Francisco. (PDR focus groups)

***PDR Rents by Square Feet of Building Space**

Rent	Square Feet - Built Space				Total
	0 - 500	501 - 2,000	2,001 - 5,000	5,001+	
\$0 - .50	1%	2%	2%	7%	11%
\$.51 - 1.00	1%	6%	15%	18%	40%
\$1.01 - 1.50	1%	6%	8%	8%	21%
\$1.51 - 2.00	1%	5%	3%	5%	14%
\$2.01 - 2.50	1%	2%	1%	1%	5%
\$2.50 +	1%	3%	2%	2%	9%
Total	6%	23%	30%	41%	100%

** Of surveys responding*

San Francisco Planning Department PDR survey

Graphic design and garment manufacturing, can be carried out in relatively small spaces in multi-story buildings. Such businesses tend to have relatively high employment densities—large number of workers compared to volume of goods produced (and therefore more workers in a given amount of space). Still others require flexible space that can be quickly and easily reconfigured to meet changing needs. The chart on the opposite page reveals the relationship between these building types and the PDR categories defined earlier. It also includes live/work and office buildings since some PDR activities can locate in such types.

- Single-story warehousing and distribution buildings with yards.
- Single-story warehousing and distribution buildings without yards.
- Multi-story PDR buildings containing a range of users.
- Mixed PDR/residential buildings with PDR and residential space in the same building but, unlike live/work, not in the same unit. In theory any number of stories, but generally multi-story.

Building Costs

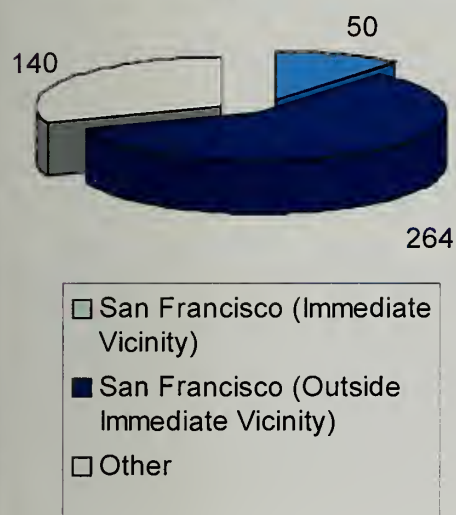
Within the PDR category the ability to pay rent ranges widely. Storage and large-scale distribution businesses, in general, cannot pay as much on a square foot basis as manufacturing, which cannot match the ability of such PDR uses as photographers and graphic designers. Construction firms, transportation firms, wholesale trade and distribution operations all tend to be at the lower end of the PDR rent scale, only able to pay less than \$0.50 per square foot. Graphic design, photography, and other media related activities are often at the higher end, able to afford rents of up to about \$1.50 per square foot. Rents paid reflect both the type of space in question and the characteristics of the firm.

Building Availability

Most industrial-style buildings used by PDR businesses have high occupancy rates. Many PDR business owners, when asked, were not interested in relocating. To move to another location in San Francisco is generally unrealistic, so relocating often means having to leave San Francisco. Once outside of their target customer and supplier area, businesses may be forced to shut down. Some businesses prefer their current location because of the advantages it offers and companies in ideal spaces suited to their business may not be able to find comparable space elsewhere, even if they wanted to move.

Appropriate land and buildings are critical to the future viability of PDR. ABAG projects some growth in the industrial sector and therefore existing space must be retained for these new businesses in San Francisco, especially because it is unrealistic to expect the construction of much new space suitable for, and affordable to, PDR activities. San Francisco's industrially zoned land is where PDR industries not compatible with other types of development should have the option to expand and change without creating conflicts.

Businesses Reporting a Majority of Employees Living in San Francisco



Labor Force

In a survey of PDR businesses, a majority (264 out of 454) reported that most of their employees lived in San Francisco. Fifty respondents indicated that their employees lived in the immediate area.

As mentioned earlier, a San Francisco location is often crucial to the success of a PDR business because of the access to particular segments of the labor force. Many design-oriented firms prefer to locate here not only because of the discerning clientele but also for the employees they hope to attract and retain. To learn trades such as cabinetmaking, metal-smithing, or video-editing takes years of training, as well as talent. Employers are looking for workers with experience and who are craftspeople. They expect an artistic sensibility and the ability to produce high-end, unique products. These kinds of employees want to live and work in San Francisco.

6

evaluating production, distribution, repair: competitiveness, compatibility, linkages

Production/Distribution/Repair activities include a wide range of businesses with various strengths and very diverse requirements. It is possible, however, to examine them using three main criteria: their competitiveness in the market economy; their compatibility with other land uses; and their links to other sectors of the local economy. This approach allows a fine-grained definition of PDR to be developed—taking into account PDR's role in the San Francisco land use system and economy and what these businesses require to survive.

Competitiveness

PDR businesses able to remain in San Francisco have been doing relatively well within the current economy and in many instances have added employees and expanded their operations over the past few years. It is clear that within the PDR sector, businesses are competitive in terms of pricing of services or goods and in terms of the wages they provide for their employees. PDR sector wages, as detailed in Chapter 4, surpass those, on average of the service sector. Low skilled employees with limited training earn on average \$14.00 per hour in trucking and warehousing industries, while retail or restaurant industries employees, with similar skill levels, earn under \$10.00 per hour. Higher-end production industries, such as finish-woodworking and construction, pay

skilled employees with years of experience about \$28-30 per hour on average. Such positions create great opportunities and maintain a socio-economic balance in San Francisco.

However, most PDR businesses cannot compete in the real estate market with office or residential uses, which can pay higher market prices for land and rent. The average asking rate for PDR uses was \$0.76 per square foot as of the 1st quarter 2002, as indicated in the previous chapter. Office uses, on the other hand, were paying an average of \$2.41 per square foot per month as of the 1st quarter 2002. The PDR businesses survey revealed that 51% of businesses pay less than \$1.00 per square foot. Over half of businesses that responded occupied small spaces of less than 5,000 square feet.

Most PDR businesses surveyed paid rents in the range of \$.51-\$1.51 per square foot, as indicated in the previous chapter. However, 11% pay amounts lower than this range, and 28% pay more. In general, distribution businesses tend to be on the lower end of the scale and certain production businesses tend to be on the higher end. The ability to pay rent is therefore related to the type of business.

Even different businesses within the same industry classification vary in this regard. For example, manufacturers focusing on specialized goods (e.g. garments) may be able to afford higher rents than manufacturers producing the same type of good but with mass-production techniques. Some businesses can pass on certain levels of rent increases to their customers easily; others cannot. Because many PDR buildings can accommodate a wide range of users with different rent-paying abilities, some displacement can occur within the PDR sector as a whole.

Compatibility

For the most part, PDR businesses do not mix well with housing because they generate noise, odors, and early morning or late night activity, especially from trucking and delivery operations. They also prefer features not generally desirable in residential areas, for instance wide streets without sidewalks, access to freeways and fueling stations, and open storage areas. Some may use or produce hazardous material. So, along with the few remaining noxious heavy industries left in San Francisco, the PDR sector includes businesses that are best separated or buffered from housing.

Nevertheless some PDR businesses, such as photography studios and graphic designers, are more compatible with residential development because of their scale, traditional hours of operation, and relative inconspicuousness. Approximately 30% of businesses responding to the PDR survey reported that, in terms of noise levels and other externalities, it would not be a problem for their business to be located next to housing.

Linkages

Almost all PDR activities are closely linked to other sectors of the City's economy—this support role is one of the main characteristics of PDR—but these linkages vary in nature. Some PDR businesses provide physical goods to San Francisco businesses, others provide a specialized service or design component (e.g., printing), others provide services involving goods (e.g., repair), and still others are tightly linked to specialized pools of labor in the City (e.g., metal fabricators).

However, some PDR businesses have stronger linkages to the local economy than others. Auto wrecking yards or storage of hazardous materials might have very limited linkages to the rest of the economy while businesses such as catering or specialized food distribution are strongly linked to hotels, convention facilities, fairs, and entertainment businesses.

Locating PDR

Using these three criteria—competitiveness (wages and real estate), compatibility, and linkages—PDR can be categorized by where it can locate: within San Francisco's industrial lands; as part of mixed-use areas; or in industrial land outside San Francisco. This assessment will allow the City to determine the future of industrial land in way that is best suited to San Francisco's land use pattern and economy. The matrix below portrays how these criteria relate to each of the three options for location.

For example, concrete plants and MUNI bus yards may belong to exclusively industrially zone land in San Francisco. They have very strong linkages since they supply essential inputs to the construction industry and allow the mobility of people in the city. They also pay reasonable wages. But, they cannot compete with other uses in the real estate market since they use warehouses and open yards and are not compatible with other uses. Another example is graphic designers. They function well in mixed-use areas in San Francisco, have strong linkages to the financial sector, pay high wages, and can afford higher rents than other PDR businesses. On the other hand, auto wrecking yards or regional warehousing may require

relocation to industrial areas outside of San Francisco because of their weak linkages to the rest of the economy, their relatively low wages, and strong environmental impacts.

Preserving Building Stock

Related to decisions about where PDR businesses should locate are decisions that need to be made regarding building stock.

It has been established in the previous chapter that the building stock suitable for PDR businesses is limited, and that PDR businesses can only pay so much for rent. This existing, but limited building stock comprises the bulk of space affordable to PDR businesses. New construction typically demands rents that are not affordable to many PDR businesses. In order to provide appropriate and affordable space for these businesses, then, concentrations of such building stock must be identified and preserved for PDR uses.

	Industrial Land	Mixed-Use Areas	Outside of San Francisco
Heavy Noise, Truck Traffic, Odors	Medium	Low	High
Linkages	High	High	Low
Competitive in terms of wages	High	High	Low
Competitive in terms of real estate	Low	Medium	na

Summary Points

Production Distribution and Repair Activities:
PDR activities have greatly evolved over the last 50 years. They comprise facets of the City’s industrial past as well as new industries. As PDR has changed, so has the space available for it. Most PDR businesses are found in the five Eastern Neighborhoods which contain the City’s remaining industrial land. It is here, however, that most recent change and development has concentrated, largely because of lower land costs and in many cases, limited community opposition. Many portions of the industrially zoned land have already experienced major transformation from predominantly PDR uses to housing and mixed uses. However, PDR activities still occupy a major portion of industrial land and a variety of industrial buildings.

Production Distribution and Repair Activities' Role in San Francisco's Economy:

PDR businesses continue to be an important part of the City's economy. They provide competitive wages and contribute to the diversity and stability of the local economy. In addition, the kinds of flexible buildings found in industrial land have served as "incubators" for new industries and startup businesses. Even as the San Francisco economy changes and the nature of PDR changes, there will be businesses in this broad category of industries. It is reasonable to expect that given the integral role played by PDR firms in the functioning of the San Francisco economy, these businesses will continue to constitute an important part of the City's job base. This conclusion is bolstered by the fact that total PDR employment grew by 13% from 1997 to 2001, precisely the period when San Francisco's "post-industrial" or "new economy" sectors were undergoing rapid change and expansion. PDR businesses are expected to maintain their share of jobs in San Francisco and, according to ABAG, grow over the next 20 years.

What Production Distribution and Repair Activities Require to Function in San Francisco's Economy:

Most PDR businesses need either specific building types or areas where they do not come into conflict with housing, or both. They need areas in which to cluster, space to maneuver trucks, and access to freeways and transportation.

PDR cannot compete in the real estate market with most other uses. Many types of buildings used by PDR industries would not be financially viable as new construction given the current cost of land in San Francisco. If existing buildings are destroyed, they may, therefore, be difficult to replace. If housing is allowed in the areas that support PDR industries, rent levels will increase, forcing PDR businesses to relocate. When the option of developing buildings with higher market values is removed, investment in PDR buildings will be more appealing.

Conclusion

PDR is diverse and dynamic. PDR industries that are important today, such as printing, may become less so, while others may increase in prominence; existing industries will adapt to new ways of doing business and will change in the process. Just as it would have been nearly impos-

sible to predict the economic trends of the 1990s, so it will be difficult to foresee future changes. In order to ensure the viability of PDR, the City need not pick and choose individual industries to protect, but rather should set the parameters within which market forces are allowed to operate. While it is important, and a matter of practicality, to carefully define the activities that comprise PDR as they exist today, to accommodate unforeseeable PDR activities requires an understanding of their essential features. Core PDR uses today and those that may evolve tomorrow share three basic characteristics mentioned throughout this report: limited ability to pay rent, the need for flexible building space, and locations away from housing.

In order for such businesses to survive and thrive, for living wages to be available to residents of San Francisco, and for San Francisco to remain diverse, and therefore healthy, policies must be in place to delineate land for industrial uses. Furthermore, in spite of the changes that the sector has undergone, PDR businesses continue to make use of many of the same buildings, partly because they are affordable, partly because they provide features such businesses require. Thus, appropriate building stock should also be preserved. Doing so will help to sustain existing PDR businesses, and, because of their flexible nature, will provide the ability to accommodate as of yet unforeseen PDR uses in the future.

The General Plan has always prioritized the importance of industrial jobs for the City, as well as the encouragement of industrial sectors that contribute to the overall health of the economy. Current policies and procedures encourage industrial uses on certain industrially zoned parcels, and encourage housing and mixed-use activities on other industrially zoned parcels. As part of the community planning process of the Eastern Neighborhoods, these policies will be translated into new zoning controls that define the ultimate uses of these parcels. Areas devoted to PDR will preserve the industrial building stock. Areas devoted to housing or mixed-use will require infrastructure improvements and appropriate urban amenities. The future use of industrial land will define the nature of San Francisco.

A

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Printing & Publishing</i>	2732	Books
	2711	Newspaper
	2721	Magazines & Periodicals
	2731	Books Publishing
	2741	Misc. Publishing
<i>Other Printing & Binding</i>	2796	Plate making
	2791	Type Setting
	2789	Book Binding
	2752	Comm.Printing Lithographic
	2759	Comm. Printing NEC
<i>Wholesale Printing & Publishing</i>	5192	Books, Periodicals & NewsPapers
<i>Photography Services</i>	7221	Photographic Studios, Potrait
	7384	Photofinishing Labs.
	7335	Commercial Photography
	7336	Commercial Art & Graphic Designs
	3861	Photography Equip. Supply
<i>Commercial Graphic Design, Interior Design & Signs</i>	1611	Highway & street construction (sign Shop)
	3552	Textile Machinery (Screen Print)
	3952	Lead pencil & Art goods
	3953	Marking devices
	3955	Carbon Paper & Inked Ribbons
	3993	Signs & advertising Specialities
	3999	Manufacturing Ind nec.
	4813	Telephone communication, exchange radio (design)
	7336	Commercial Art & Graphic Design
	7389	Business serv. Nec (Design Related)
<i>Research & Development</i>	7389	Business Serv. Necessary (R&D only)

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Radio & TV Stations & Communication Services</i>	4832	Radio Broadcasting Stations
	4833	T.V. Broadcasting Station
	7389	Business Serv. Necessary (Communication only)
	4841	Cable TV services
	4899	Communication services
	4812	Radio Telephone Communications
	4813	Telecomm. Exchange Radius
	4822	Telegraph & other Comm.
<i>Garment Manufacturing</i>	2396	Auto Apparel Trimmings
	2394	Canvas Related Products
	2391	Curtains & Drapes
	2399	Fabric & Textile Products
	2381	Fabric Dress Work
	2369	Girls Outwear
	2353	Hats Caps
	2392	Household Furnishings
	2326	Mens & Boys Clothing
	2311	Mens & Boys Suits
	2395	Pleating & Stitching
	2393	Textile Bags
	2331	Wommen & Misses Blouses
	2335	Wommen & Misses Dresses
	2339	Wommen & Misses Outerwear
<i>Other Apparel</i>	2273	Carpet & Rugs
	2298	Cordage & Twine
	2211	Fabric Mills Cotton
	2231	Fabric Mills Wool
	2269	Finishing Plant NEC
	2261	Finishing Plant Cotton
	2253	Knit Outwear Mills
	2241	Narrow Fabric Mills
	2284	Thread Mills

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Wholesale Apparel</i>	5136	Mens & Boys clothing
	5139	Footwear
	5137	Womens & Children Clothing
	5131	Piece Good notion
	3965	Buttons etc.
<i>Transportation & Delivery Services</i>	4724	Travel Agencies
	4725	Tour Operators
<i>Taxi/Limo/Shuttle</i>	4173	Bus Terminals& Svc Facilities
	4142	Bus Charter Svc Except local
	4121	Taxi Cabs
	4119	Local Passenger Tp. Nec
	4111	Local & Suburban Transit
<i>Trucking Freight & Packing</i>	7389	Business Serv.nec
	4783	Packing & Crafting
	4731	Freight Transportation
	4214	Local Trucking with storage
	4213	Trucking except local
	4212	Local Trucking without storage
<i>Parcel Shipping & Courier Services</i>	7389	Business Serv.nec (Courier)
	4581	Airports,flying fields & Services
	4513	Air courier services
	4491	Marine cargo
	4424	Deep sea domestic transport of freight
	4311	US Postal Service
	4215	Courier svcs except air
<i>Utilities</i>	8611	PG & E
	4911	Electrical services (PG&E)
	4813	Tele Exchange(AT&T, Pac Bell)

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Small Scale Mfg. & Wholesale</i>	3842	Surgical Appliances & supplies
	3942	Dolls & Stuffed toys
	3944	Games toys & children's Vehicles
	3949	Sporting & Athletic Goods
	5091	Toys & hobby goods
	5092	Sporting & recreation goods
	3841	Surgical & medical Instruments
	3829	Measuring & controlling devices
	3812	Search & Navigation Instruments
	5046	Commercial Equip. nec
	5045	Computers & peripheral software
	5044	Office equip.
	5043	Photographic Equip. & supplies
	5051	Metals service centers & offices
	5049	Professional Equip.
	5048	Ophthalmic goods
	5047	Medical & hospital equip
	3578	Calculating & accounting equip.
	3571	Electronic computers
<i>Public Warehousing & Storage</i>	4225	General Warehousing & storage
	4222	Refrigerate Warehousing & Storage
	4226	Special Warehousing

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Sound Recording/Film & Motion Picture Production</i>	7829	Film delivery, Motion picture
	7822	Film exchanges, Motion picture
	3861	Sound recording, & reproducing equip.
	3652	Prerecorded records & tapes
	3663	Radio TV Communication Equip.
	3679	Electronic components nec.
	3695	Magnetic & Optical Recording Media
	7389	Business Serv. Nec (Recording & syndicated product biz)
	7812	Motion Picture Video Products
	7819	Svcs. Allied Motion Picture
<i>Wholesale Flowers</i>	5193	Flowers and florist supplies
	5191	Flowers and Field Bulbs
<i>Catering & Food Processing</i>	2051	Bread Cake Related Products
	2033	Canned Fruits & Vegetables
	2091	Canned fish
	2064	Candy & Confectioneries
	2052	Cookies & Crakers
	2087	Extracts & Syrups
	2099	Food Preparation NEC
	2037	Frozen Fruits & Vegies
	2038	Frozen Specialities
	2098	Macaroni & Spagetti
	2011	Meat Packing
	2013	Sausage Preparation
	208	Beverages
	2131	Chewing Tobacco

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Building Construction & Maintenance</i>	1731	Electrical Work
	1751	Carpentry Work
	1752	Floor Laying Work
	1793	Glass Glazing Work
	1796	Installation Bldg. Equipment
	1741	Missionary and Stone Work
	1711	Plumbing & Heating & AC
	1742	Plastering & dry wall
	1721	Painting & Paper Hanging
	1761	Roofing Siding and Sheet Metal
	1799	Special Trade Construction
	1791	Structural Steel Erection
	1743	Tile & Marble works
	1781	Waste Water Drilling
	1795	Wrecking & Demolition
	1541	Industrial Bldg. Warehouse Construction
	1542	Non-residential Bldg. Construction
	1522	Residential Construction
	1521	Single Family Housing Construction
	1611	Highway construction
	1623	Water Sewer & Utility construction
	1622	Bridge & tunnel Construction
	1629	Heavy Construction
	7389	Business serv. Nec
	3599	Industrial machinery nec.
	3499	Fabricated metal products
	3496	Misc. fabricated wire products
	3479	Metal coating & Allied serv.
	3471	Plating & Polishing
	3469	Metal stamping & nec.
	3465	Automotive stampings
	3451	Screw machine products
	3449	Misc. metal works
	3446	Architectural metal work
	3444	Sheet metal work

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Building Construction & Maintenance</i>	3442	Metal doors,sash,& trim
	3441	fabricated structural metal
	3432	Plumbing fixture fittings & trim
	3429	Hardware nec.
	3423	Hand & edge tools
	3412	Metal Barrels, drums & pails
	3366	Copper foundries
	3341	Secondary nonferrous metals
	3317	Steel pipes & tubes
	3299	Non-Metallic mineral producta.nec
	3281	Cut stone & stone products
	2844	Toilet preparations
	2842	Polishes & sanitaion goods
	1411	Dimension stones
<i>Concrete Works</i>	1771	Concrete works
<i>Food & Beverage Wholesale & Distribution</i>	5145	Confectionery
	5143	Dairy Products,exc.dried or canned
	5146	Fish & seafood
	5148	Fresh fruits & vegies
	5149	Grocery related products
	5141	General groceries
	5147	Meat and Meat products
	5142	Packed frozen goods
	5144	Poultry
<i>Furniture & Fixture Manu. & Repair & Wood Work</i>	5181	Beer & Ale
	5182	Wine & distilled Beverages.
	2591	Drapery Hardware Blinds
	2599	Furniture Fixtures
	2519	Household Furnitures
	2514	Metal Household Furnitures
	2513	Public Bldg. Related Furnitures

Appendix A

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Furniture & Fixture Manu. & Repair & Wood Work</i>	2542	Partitions & Fixtures except wood
	2512	Upholstered Household furnitures
	2541	Wood Partitions Fixtures
	2511	Wood Household Furnitures
	2521	Wood Office furnitures
	2426	Hardwood Dimension & Flooring mills
	2436	Hardwood Veneer & Flooring mills
	2431	Millwork
	2449	Wood Containers
	2434	Wood Kitchen Cabinets
	2448	Wood Pallets Skids
	2499	Wood Products Necessay
	2411	Logging
	2421	Sawmills & planing mills, general
	3229	Pressed & blown glass nec.
	3231	Products of purchased glass
	3269	Pottery products nec.
	7389	Business serv.nec.(Furniture Fixtures)
	7641	Reupholstery & Furniture repair
<i>Furniture Wholesale & Showrooms</i>	5021	Furniture
	5023	Home Furnishings
	5712	Funiture stores
	7389	Business Serv.Nec.(Showrooms, Galleries, Warehouses)
	3999	Manufacturing Industries nec.(Designs)
<i>Appliance Repair</i>	7629	Electrical repair shops nec
	7699	repair services nec.
	7692	Welding repair
	7694	Armature rewinding shops
	7631	watch, clock & jewelry repair
	7623	Refrigertaiton serv.repair
	7622	Radio TV repair

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Large Scale Mfg. & wholesale</i>	5088	Transportation Equip. & supplies
	5087	Service Establishment equip.
	5085	Industrial Supplies
	5084	Industrial machineries
	5082	Construction & minning Instruments
	5078	Refrigeration Equip. & supplies
	5075	Warm air heating& AC
	5074	Plumbing & hydronic heating supplies
	5063	Electrical apparatus & equip.
	5064	Electrical appliances , TV & Radios
	5065	Electronic parts & Equip
	5072	Hardware
	3599	Industrial machinery nec.
	3589	Service industry machinery nec.
	3585	Refrigeration & heating equip.
	3553	Wood working machinery
	3544	Specialties, tools, jigs & fixtures
	3543	Industrial Patterns
	3536	Hoists, cranes, & monorails
	3535	Conveyors & conveying equip.
	3531	Construction machinery
	7997	Membership Sports& rec. clubs
	7996	Amusement parks
	7991	physical fitness facilities
	7941	Sports club Managers &
	7929	Entertainers,& Entertainment Groups
	7922	Theatrical Producers & svcs
	7911	Dance studios, schools & Halls

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Auto Repair</i>	7542	Carwash
	7538	Auto Repair Shops
	7532	Body Repair
	7549	Auto Services nec
	7533	Auto exhaust system repair
	7536	Auto glass replacement svc
	7537	Auto transmission repair svc
	1622	Bridge tunnel & elevated hwy construction(towing company)
<i>Interior, Household & Appliance Wholesellers</i>	7389	Business services nec. (lighting products)
	5065	Electrical parts & equip.
	5064	Electrical Appliances tel Rad
	5063	Electrical Apparatus Equip.
	3645	Residential Lighting fixtures
<i>Export/Import Trading Companies</i>	5199	Non-Durable goods
	5099	Durable goods Nec
<i>Jewelry & Precious Stones & Costume Jewelry Production</i>	7389	Business service necessary
	3961	Costume Jewelry
	3915	Jewelrs Material & Lapidary works
	3911	Jewelery & Precious Material
	3851	Ophthalmic goods
	2911	Petroleum refining (Diamond store)
	1499	Misc. Nonmetallic minerals (Crystal store)
	5094	Jewelry & precious stones
	3914	Silverware & plated ware
<i>Landscaping/ Horticulture & Animal Services</i>	781	Landscaping
	782	Lawn & Garden
	783	Ornamental Tree Services
	752	Animal Services

<i>Industry Type</i>	<i>SIC Code</i>	<i>Line of Business</i>
<i>Chemicals/Plastics/Leather Goods Manufacturing & Wholesale</i>	3161	Luggage
	3172	Leather Goods
	3089	Plastic Products
	2821	Pharmaceuticals
	2834	Pharmaceuticals
	5172	Petroleum Products
	2851	Paints & Allied Products
	5169	Chemicals & Paints
	5162	Plastic & Allied Products
	5122	Drug Preparation Services
<i>Waste Management</i>	4941	Water Supply
	4953	Refuse System
	4959	Sanitary Services

Eastern Neighborhoods Business Analysis

INDUSTRY TYPE	Businesses	Avg Emp	Total Emp	Total Sales	Avg Sales	Total Sqft Occupied	Emp Density
Printing & Publishing	72	18	1,282	205,828,921	2,858,735	313,780	245
Other Printing & Binding	152	9	1,426	110,791,527	728,892	736,090	516
Wholesale Printing & Pub	34	8	284	25,867,954	760,822	279,740	985
Photography Services	174	4	683	54,207,497	311,537	472,560	692
Graphic Design, Int.Design & Signs	262	6	1,502	134,496,751	513,346	657,550	438
Radio, T.V. Stations & Comm Svcs	36	33	1,194	105,798,543	2,938,848	270,200	226
Garment Manufacturing	69	35	2,413	164,061,182	2,377,698	935,320	388
Other Apparel	69	21	1,425	79,324,315	1,149,628	491,960	345
Wholesale Apparel	93	9	870	177,908,223	1,912,992	405,950	467
Transportation & Delivery Svcs	51	35	1,796	90,563,579	1,775,756	274,570	153
Taxi/Limo/Shuttle	43	40	1,739	37,544,668	873,132	324,200	186
Trucking, Freight, & Packing	92	12	1,109	224,540,401	2,440,657	539,900	488
Parcel Shipping & Courier Svcs	30	179	5,375	19,500,000	650,000	110,800	47
Utilities	10	93	931	0	0	120,800	130
Small Scale Manufacturing & Wholesale	176	7	1,288	243,094,064	1,381,216	742,500	576
Public Warehousing & Storage	26	6	151	3,775,000	145,192	601,700	3,985
Sound Recording/Film Prod	147	5	759	73,631,422	500,894	363,730	479
Wholesale Flowers	39	9	355	33,577,401	860,959	329,510	928
Feathering & Food Processing	65	19	1,250	188,371,934	2,898,030	796,520	637
Food & Beverage Wholesale & Distribution	165	12	1,961	562,077,136	3,406,528	1,162,940	594
Building Construction & Maintenance	645	12	7,460	1,459,056,564	2,262,103	2,450,760	328
Auto Wrecking & Scrap Storage Yards	11	10	108	12,440,000	1,130,909	73,300	679
Concrete Works	14	11	148	12,030,000	859,286	35,400	239
Wholesale Construction & Distribution	61	7	425	81,313,944	1,333,015	404,600	952
Furniture Mfg & Rpr.Wood Work	122	8	969	88,472,106	725,181	776,980	802
Furniture Wholesale & Showrooms	154	8	1,156	175,879,491	1,142,075	960,470	832
Appliance Repair	92	4	364	25,477,112	276,925	227,380	625
Major, Household & Appliance Wholesaler	60	9	537	122,790,588	2,046,510	493,190	918
Large Scale Manufacturing & Wholesale	48	15	743	133,819,487	2,787,906	860,100	1,158
Trucking, Rental & Towing	23	7	154	3,767,000	163,783	81,400	529
Wholesale Auto Parts	38	13	482	48,315,635	1,271,464	364,900	757
Auto Repair	259	6	1,562	91,020,214	351,429	1,342,800	860
Export/Import Trading Companies	128	8	1,023	138,700,997	1,083,602	498,110	487
Jewelry Wholesale Mfg	146	5	781	134,017,162	917,926	275,590	353
Landscaping/Horticulture & Animal Svcs	42	8	327	40,349,812	960,710	179,630	549
Chemicals/Plastics/Leather Goods mfg	44	14	610	63,336,987	1,439,477	321,200	630
Waste Management	16	63	1,003	89,502,992	5,593,937	75,200	75
TOTAL	3,708	21	45,645	5,255,250,609	1,428,196	19,351,330	631

B

The Planning Department conducted a survey of Production, Distribution, and Repair (PDR) businesses in the Eastern Neighborhood Community Planning Areas of Bayview, Mission, South of Market, and Showplace Square-Potrero Hill. This survey gathered detailed information about the needs and performance of PDR businesses. This information complements the secondary data gathered for the analysis of PDR businesses. The Planning Department designed the survey instrument, selected the sample, analyzed the data, and prepared this summary report.

The purpose of the survey was to determine the needs and detailed characteristics of PDR businesses in San Francisco. The survey assesses the ability of PDR businesses to compete with other uses based on rental rates and wages, their buildings, transportation, and infrastructure needs, the compatibility of PDR businesses with other uses, and profiles of suppliers, customers, and employees.

Highlights of Survey Results

The survey yielded a variety of data on PDR businesses in San Francisco. Frequencies for tabulated data are included at the end of this appendix. Selected highlights from the survey include:

- 70% of businesses report they could not be next door to housing;
- 43% of businesses pay over \$16 an hour for their non-managerial staff;
- 50% of businesses have non-managerial employees who have obtained only a high school diploma;
- 26% of businesses are considering contraction or relocation;
- 58% of businesses could not run their business on the second floor;
- 48% of businesses that rent their space pay \$1.50 or less per square foot per month;
- 48% of the businesses have been at their location for over 10 years;
- 70% of businesses consider it very important to be near their customers, and;
- 48% of businesses need access to truck routes.

Description

Data Sources

PDR businesses are defined based on industry type and location. These businesses are included in the SIC codes listed in *Appendix A*, located outside the financial district. For the purposes of this survey, the total universe of PDR businesses was defined as those located in the community planning areas of Mission, Bayview, Showplace Square, Potrero Hill, and South of Market. The Dunn and Bradstreet business database 2001 was the main data source used to select the PDR survey sample.

Methodology

Sampling & Sample Size

From the Dunn and Bradstreet database, a universe of 3,735 PDR businesses was established. Businesses were sorted by SIC and zip code, and every other business was selected to ensure appropriate distribution by location and industry. A total of 2,000 surveys were received by PDR businesses. Planning Department staff supplemented this random sampling by gathering additional field surveys from each of the five areas.

A target sample size of 300 responses was established from a universe of 3,735 PDR businesses. In order to insure an appropriate cross-sectional distribution of responses by location and industry type, a target number of responses was established based on the existing distribution of businesses as indicated in the table below.

Businesses were categorized by planning area and business classifica-

Percentage of PDR Businesses by Area

Planning Area	Production	Distribution	Repair
SOMA	13.60%	10.90%	3.50%
Mission	9.30%	6.20%	3.80%
Showplace/Potrero	6.20%	12.60%	1.50%
Bayview	<u>12.90%</u>	<u>14.60%</u>	<u>5.00%</u>
<i>Total</i>	41.90%	44.30%	13.80%

***Target Number of Surveys**

Planning Area	Production	Distribution	Repair
SOMA	41	33	10
Mission	28	18	11
Showplace/Potrero	18	38	5
Bayview	<u>39</u>	<u>44</u>	<u>15</u>
<i>Total</i>	126	133	41

*Based on Percentage of PDR Businesses Distribution in Eastern Neighborhoods

tion to determine the percentage of each. This percentage was used to determine the target number of instruments needed.

A total of 464 responses were received. Total responses received

Surveys Received

Planning Area	Production	Distribution	Repair	Other	Total
SOMA	68	32	24	8	132
Mission	40	13	27	15	95
Showplace/Potrero	25	54	6	8	93
Bayview	49	41	11	10	111
Other	<u>12</u>	<u>9</u>	<u>8</u>	<u>4</u>	<u>33</u>
<i>Total</i>	194	149	76	45	464

broke down as follows: 95 from the Mission; 111 from Bayview; 93 from Showplace Square/Potrero; 132 from South of Market; and 33 from PDR businesses outside the designated community planning area.

1 What kind of business are you in?		
	Frequency	Percent
Production	100	22.03
Distribution	65	14.32
Repair/Service	151	33.26
*Other/No Response	138	30.4
Total	454	100

3 Have you recently expanded or are you considering expansion?		
	Frequency	Percent
No Response	24	5.29
n	315	69.38
y	115	25.33
Total	454	100

4 Are you considering contraction or relocation?		
	Frequency	Percent
No Response	333	73.35
contraction	37	8.15
relocation	84	18.50
Total	454	100

4 Why?		
	Frequency	Percent
No Response	390	85.90
Lack of Space	39	8.59
Lack of Space, Lack of Labor	2	0.44
Lack of Space, Labor, Land, Inadequate Transportation	1	0.22
Lack of space, Labor, Inadequate Transportation	2	0.44
Lack of Space, Land	7	1.54
Lack of Space, Inadequate Transportation	3	0.66
Lack of Labor	4	0.88
Lack of Land	3	0.66
Inadequate Transportation	3	0.66
Total	454	100

6 How long is the term of your lease? (in years)		
	Frequency	Percent
No Response	155	34.14
0 to 1	34	7.49
1 to 3	58	12.78
4 to 7	117	25.77
8 to 10	47	10.35
10+	43	9.47
Total	454	100

7 How many years do you have left on your lease?		
	Frequency	Percent
No Response	180	39.65
0 to 1	85	18.72
1 to 3	102	22.47
4 to 7	87	19.16
Total	454	100

8 How many square feet of built space does your business occupy?		
	Frequency	Percent
No Response	22	4.85
0 to 500	18	3.96
501 to 2,000	91	20.04
2,001 to 5,000	127	27.97
5001+	196	43.17
Total	454	100

9 How many square feet of outdoor space does your business occupy?		
	Frequency	Percent
No Response	65	14.32
0 to 500	261	57.49
501 to 2,000	45	9.91
2,001 to 5,000	29	6.39
5,001+	54	11.89
Total	454	100

10 Could your business run on a second/third floor?		
	Frequency	Percent
No Response	17	3.74
no	264	58.15
yes	173	38.11
Total	454	100

11 How much do you pay per square foot per month for rent/lease?		
	Frequency	Percent
No Response	153	33.70
0-\$0.50	36	7.93
\$0.51-\$1.00	116	25.55
\$1.01-\$1.50	66	14.54
\$1.51-\$2.00	41	9.03
\$2.01-\$2.50	15	3.30
More than \$2.50	27	5.95
Total	454	100

12 Have you recently invested in your building?		
	Frequency	Percent
Less than \$100,000	100	22.03
More than \$100,000	51	11.23
No	303	66.74
Total	454	100

12 How many years have you been at this location?		
	Frequency	Percent
No Response	15	3.30
0 to 1	29	6.39
1 to 3	54	11.89
4 to 10	138	30.40
10+	218	48.02
Total	454	100

13 If you have other locations, what functions do they serve?		
	Frequency	Percent
No Response	397	87.44
Office	16	3.52
Industrial/Storage	19	4.19
Parking	7	1.54
Other	15	3.30
Total	454	100

14 If proximity to customer base is important for your business at its current location, is it currently available?		
	Frequency	Percent
No Response	108	23.79
n	28	6.17
y	318	70.04
Total	454	100

14 If proximity to local suppliers is important for your business at its current location, is it currently available?		
	Frequency	Percent
No Response	186	40.97
n	47	10.35
y	221	48.68
Total	454	100

14 | If proximity to similar businesses is important for your business at its current location, is it currently available?

	Frequency	Percent
No Response	217	47.80
n	45	9.91
y	192	42.29
Total	454	100

14 | If transportation is important for your business at its current location, is it currently available?

	Frequency	Percent
No Response	153	33.70
n	35	7.71
y	266	58.59
Total	454	100

14 | If parking is important for your business at its current location, is it currently available?

	Frequency	Percent
No Response	111	24.45
n	94	20.70
y	249	54.84
Total	454	100

14 | If safety is important for your business at its current location, is it currently available?

	Frequency	Percent
No Response	168	37.00
n	77	16.96
y	209	46.03
Total	454	100

14 | If space is important for your business at its current location, is it currently available?

	Frequency	Percent
No Response	155	34.14
n	58	12.56
y	241	53.08
Total	454	100

14 If space is important for your business at its current location, is it currently available?		
	Frequency	Percent
No Response	155	34.14
n	58	12.56
y	241	53.08
Total	454	100

14 If local labor is important for your business at its current location, is it currently available?		
	Frequency	Percent
No Response	214	47.14
n	37	8.15
y	203	44.71
Total	454	100

14 If affordable housing is important for your business at its current location, is it currently available?		
	Frequency	Percent
No Response	226	49.78
n	148	32.6
y	80	17.62
Total	454	100

15 | What are your business's transportation needs? For your freight:

	Frequency	Percent
No Response	51	11.23
Truck Routes	25	5.51
Truck routes, Parking	29	6.39
Truck routes, Parking, Freeway	34	7.49
Truck routes, Parking, Freeway, Downtown access	1	0.22
Truck routes, Parking, Freeway, Airport access	4	0.88
Truck routes, Parking, Freeway, Airport access, Port access, Downtown access	17	3.74
Truck routes, Parking, Freeway, Airport access, Downtonw access	10	2.20
Truck routes, Pareking Freeway, Port access, Downtown Access	3	0.66
Truck routes, Parking, Freeway, Downtown access	41	9.03
Truck routes, Parking, Airport access	2	0.44
Truck routes, Parking, Airport accesss, Downtown Access	1	0.22
Truck routes, Parking, Airport access, Downtown access	3	0.66
Truck routes, Parking, Port access	3	0.66
Truck routes, Parking, Downtown access	10	2.20
Truck routes, Freeway	15	3.30
Truck routes, Freeway, Airport access	2	0.44
Truck routes, Freeway, Airport Access, Downtown Access	1	0.22
Truck routes, Freeway, Port access	1	0.22
Truck routes, Freeway, Downtown access	13	2.86
Truck routes, Airport access	1	0.22
Truck routes, Airport access, Port Access	1	0.22
Truck routes, Port access	2	0.44
Truck routes, Downtown access	3	0.66
Parking	63	13.88
Parking, Freeway	29	6.39
Parking, Freeway, Airport access	3	0.66
Parking, Freeway, Airport access, Port access, Downtown access	3	0.66
Parking, Freeway, Airport access, Downtown access	10	2.20
Parking, Freeway, Port access	1	0.22
Parking, Freeway, Downtown access	28	6.17
Parking, Airport access	3	0.66
Parking, Airport access, downtown access	1	0.22
Parking, Port access	1	0.22
Parking, Downtown access	12	2.64
Freeway	7	1.54
Freeway, Airport access	2	0.44
Freeway, Airport access, Port access, Downtown access	1	0.22
Freeway, Airport access, Downtown access	1	0.22
Freeway, Downtown access	10	2.20
Airport access	2	0.44
Airport accesss, Downtown access	1	0.22
Downtown access	3	0.66
Total	454	100

15 What are your business's transportation needs? For your employees:		
	Frequency	Percent
No Response	56	12.33
Bart	8	1.76
Bart, Bus	17	3.74
Bart, Bus, Parking	32	7.05
Bart, Bus, Parking, Freeway	98	21.59
Bart, Bus, Freeway	9	1.98
Bart, Parking	8	1.76
Bart, Parking, Freeway	12	2.64
Bart, Freeway	4	0.88
Bus	29	6.39
Bus, Parking	40	8.81
Bus, Parking, Freeway	25	5.51
Bus, Freeway	7	1.54
Parking	68	14.98
Parking, Freeway	24	5.29
Freeway	17	3.74
Total	454	100

16 Where are your suppliers located?		
	Frequency	Percent
No Response	162	35.68
Immediate Area	30	6.61
San Francisco	72	15.86
Bay Area	190	41.85
Total	454	100

17 Where are your customers located?		
	Frequency	Percent
No Response	107	23.56
Immediate Area	32	7.05
San Francisco	90	19.82
Bay Area	225	49.56
Total	454	100

18 What would be appropriate next door to your business?		
	Frequency	Percent
No Response	28	6.17
Housing	4	0.88
Housing, Retail	3	0.66
Housing, Retail, Schools, Heavy Industrial, Light Industrial	3	0.66
Housing, Retail, Schools, Heavy Industrial, Light Industrial, Office Space	5	1.10
Housing, Retail, Schools, Heavy Industrial, Light Industrial, Office Space, Other	7	1.54
Housing, Retail, Schools, Heavy Industrial, Office Space, Other	1	0.22
Housing, Retail, Schools, Light Industrial, Office Space	18	3.96
Housing, Retail, Schools, Light Industrial, Office Space, Other	2	0.44
Housing, Retail, Schools, Office	4	0.88
Housing, Retail, Schools, Office, Other	1	0.22
Housing, Retail, Heavy Industrial, Light Industrial	1	0.22
Housing, Retail, Heavy Industrial, Light Industrial, Office	4	0.88
Housing, Retail, Heavy Industrial, Office Space	1	0.22
Housing, Retail, Light Industrial	4	0.88
Housing, Retail, Light Industrial, Office	15	3.30
Housing, Retail, Light Industrial, Other	1	0.22
Housing, Retail, Office	9	1.98
Housing, Retail, Office, Other	3	0.66
Housing, Schools	2	0.44
Housing, Schools, Heavy Industrial, Light Industrial, Office	1	0.22
Housing, Schools, Light Industrial, Office	2	0.44
Housing, Heavy Industrial, Light Industrial	1	0.22
Housing, Heavy Industrial, Light Industrial, Office	2	0.44
Housing, Light Industrial	4	0.88
Housing, Light Industrial, Office	10	2.20
Housing, Office	4	0.88
Retail	24	5.29
Retail, Schools, Heavy Industrial, Light Industrial	1	0.22
Retail, Schools, Heavy Industrial, Light Industrial, Office, Other	1	0.22
Retail, Schools, Light Industrial	1	0.22
Retail, Schools, Light Industrial, Office	5	1.10
Retail, Schools, Light Industrial, Office	1	0.22
Retail, Schools, Light Industrial	4	0.88
Retail, Heavy Industrial, Light Industrial, Office	10	2.20
Retail, Heavy Industrial, Light Industrial, Office, Other	2	0.44
Retail, Light Industrial, Office, Other	7	1.54
Retail, Light Industrial, Office	34	7.49
Retail, Light Industrial, Office, Other	2	0.44
Retail, Office	13	2.86
Retail, Other	2	0.44
Schools	2	0.44
Schools, Heavy Industrial, Light Industrial, Office	1	0.22
Schools, Light Industrial, Office	3	0.66

Appendix B

18 What would be appropriate next door to your business?		
Heavy Industrial	3	0.66
Heavy Industrial, Light Industrial	21	4.63
Heavy Industrial, Light Industrial, Office	24	5.29
Heavy Industrial, Light Industrial, Office, Other	4	0.88
Heavy Industrial, Light Industrial, Other	5	1.10
Heavy Industrial, Light Industrial, Other	1	0.22
Light Industrial	70	15.42
Light Industrial, Office	34	7.49
Light Industrial, Office, Other	1	0.22
Light Industrial, Other	1	0.22
Office	24	5.29
Office, Other	1	0.22
Other	12	2.64
Total	454	100

19 How many employees do you have?		
	Frequency	Percent
No Response	23	5.07
Less than 5	150	33.04
5 - 10	128	28.19
11 - 20	66	14.54
21 - 50	59	13.00
50+	28	6.17
Total	454	100

20 What percent of your employees live in the immediate area?		
	Frequency	Percent
0	338	74.45
1	3	0.66
2	2	0.44
5	12	2.64
6	1	0.22
9	1	0.22
10	15	3.30
13	1	0.22
14	1	0.22
20	13	2.86
25	11	2.42
30	1	0.22
33	3	0.66
40	2	0.44
50	12	2.64
60	3	0.66
75	2	0.44
80	5	1.10
87	1	0.22
90	3	0.66
95	1	0.22
100	23	5.07
Total	454	100

20 What percent of your employees live in SF?		
	Frequency	Percent
No Response	1	0.22
0	130	28.63
1	3	0.66
5	5	1.10
8	1	0.22
10	12	2.64
12	1	0.22
13	1	0.22
15	7	1.54
16	1	0.22
17	1	0.22
20	19	4.19
22	1	0.22
25	18	3.96
28	1	0.22
30	12	2.64
33	4	0.88
35	3	0.66
38	1	0.22
40	13	2.86
45	1	0.22
50	50	11.01
55	1	0.22
60	13	2.86
63	1	0.22
65	3	0.66
67	1	0.22
70	14	3.08
75	19	4.19
80	17	3.74
85	2	0.44
86	2	0.44
90	25	5.51
95	3	0.66
100	67	14.76
Total	454	100

20 What percent of your employees live in the Bay Area?		
	Frequency	Percent
No Response	3	0.66
0	165	36.34
1	1	0.22
5	4	0.88
10	25	5.51
12	1	0.22
15	3	0.66
20	24	5.29
25	18	3.96
30	12	2.64
33	1	0.22
35	2	0.44
37	1	0.22
40	20	4.41
45	1	0.22
50	44	9.69
55	2	0.44
56	1	0.22
60	9	1.98
65	4	0.88
66	2	0.44
67	3	0.66
68	1	0.22
70	9	1.98
75	14	3.08
80	14	3.08
85	3	0.66
87	1	0.22
90	9	1.98
94	1	0.22
95	1	0.22
99	2	0.44
100	53	11.67
Total	454	100

20 What percent of your employees live in other areas?		
	Frequency	Percent
No Response	4	0.88
0	413	90.97
5	3	0.66
10	8	1.76
15	3	0.66
16	1	0.22
20	6	1.32
25	5	1.10
30	1	0.22
35	1	0.22
40	1	0.22
50	3	0.66
70	1	0.22
75	1	0.22
98	1	0.22
100	2	0.44
Total	454	100

21 What is the average hourly wage of non-managerial staff?		
	Frequency	Percent
No Response	61	13.44
\$6.75 or less	2	0.44
\$6.76 - \$10	51	11.23
\$11 - \$15	141	31.06
\$16 - \$20	119	26.21
\$21 - \$25	49	10.79
\$26+	31	6.83
Total	454	100

22 What is the average educational level attained by non-managerial staff?		
	Frequency	Percent
No Response	48	10.57
High School	229	50.44
Vocational Training	47	10.35
2-year degree	65	14.32
4-year degree	50	11.01
Beyond College	15	3.30
Total	454	100

* Other combines P, D, R, and Service

The Planning Department is involved in a community planning process and is making decisions about zoning changes to the Eastern Neighborhoods. The purpose of this survey is to gather your input as it relates to this important planning process. All information is confidential. Survey results will be reported only in the aggregate and will not be singled out by company. Please answer the questions, staple the questionnaire and send it back to the Planning Department with the pre-paid postage. Please Contact Sue Exline if you have any questions: 558-6332, or Susan_Exline@ci.sf.ca.us.

::

 ::

Business | _____

Name | _____

Address | _____

Phone Number | _____

Email | _____

Hours of Operation | _____

::
 About Your Business
 ::

- 1 / What kind of business are you in?
- Production/Manufacturing..... ☐
 - Distribution..... ☐
 - Repair..... ☐
 - Storage..... ☐
 - Retail..... ☐
 - Service..... ☐
 - Other: _____ ☐

2 / Please describe your business: _____

3 / Have you recently expanded or are you considering expansion?

Yes ☐ No ☐

4 / Are you considering:

Contraction..... ☐ where? _____

Relocation..... ☐ where? _____

- Why? (✓ all that apply)
- Lack of Space..... ☐
 - Lack of Labor..... ☐
 - Lack of Land..... ☐
 - Inadequate Transportation..... ☐

Other: _____

::
 About Your Building
 ::

5 / Do you own or rent/lease?

Own ☐ Rent/Lease ☐

6 / How long is the term of your lease? (in years)

0-1 ☐ 1-3 ☐ 4-7 ☐ 8-10 ☐ 10+ ☐

7 / How many years do you have left on your lease?

0-1 ☐ 1-3 ☐ 4-7 ☐

- 8 / How many square feet of built space does your business occupy?
- 0-500 ☐ 501-2,000 ☐ 2,001-5,000 ☐ 5,001+ ☐
- 9 / How many square feet of outdoor space does your business occupy? (e.g. open areas for storage, pkg, etc.)
- 0-500 ☐ 501-2,000 ☐ 2,001-5,000 ☐ 5,001+ ☐
- 10 / Could your business run on a second/third floor?
- Yes ☐ No ☐
- 11 / How much do you pay per square foot per month for rent/lease?
- 0-\$0.50..... ☐
- \$0.51-\$1.00..... ☐
- \$1.01-\$1.50..... ☐
- \$1.51-\$2.00..... ☐
- \$2.01-\$2.50..... ☐
- More than \$2.50..... ☐
- 12 / Have you recently invested in your building?
- No ☐
- Yes ☐ ----- Less than \$100,000 ☐
- More than \$100,000 ☐
- ::
 About Your Location
 ::
- 12 / How many years have you been at this location?
- 0-1 ☐ 1-3 ☐ 4-10 ☐ 10+ ☐
- 13 / How many other locations do you have in San Francisco?
- Outside of San Francisco? _____
- What functions do they serve?
- Same..... ☐
- Office..... ☐
- Industrial/Storage..... ☐
- Parking..... ☐
- Other..... ☐

14 / Which of the following are important for your business at its current location? (✓ all that apply)

	Currently Available	Not Available
Proximity to Customer Base.....	<input type="checkbox"/>	<input type="checkbox"/>
Proximity to Local Suppliers.....	<input type="checkbox"/>	<input type="checkbox"/>
Proximity to Similar Businesses.....	<input type="checkbox"/>	<input type="checkbox"/>
Transportation.....	<input type="checkbox"/>	<input type="checkbox"/>
Parking.....	<input type="checkbox"/>	<input type="checkbox"/>
Safety.....	<input type="checkbox"/>	<input type="checkbox"/>
Space.....	<input type="checkbox"/>	<input type="checkbox"/>
Local Labor.....	<input type="checkbox"/>	<input type="checkbox"/>
Affordable housing for employees	<input type="checkbox"/>	<input type="checkbox"/>

Other: _____

15 / What are your business's transportation needs? (✓ all that apply)

For your freight:

Truck routes..... ☐
Parking..... ☐
Freeway..... ☐
Airport access..... ☐
Port access..... ☐
Downtown access..... ☐

Other: _____

For your employees:

Bar ☐ Bus ☐ Parking ☐ Freeway ☐
Other: _____

16 / Where are your suppliers located? (✓ one)

Immediate Area ☐ SF ☐ Bay Area ☐
Other: _____

17 / Where are your customers located? (✓ one)

Immediate Area ☐ SF ☐ Bay Area ☐
Other: _____

18 / What would be appropriate next door to your business? (✓ all that apply)

Housing..... ☐
Retail..... ☐
Schools/Institutions..... ☐
Heavy Industrial..... ☐
Light Industrial..... ☐
Office Space..... ☐
Other..... ☐

19 / How many employees do you have? (✓ one)

Less than 5..... ☐ 5-10..... ☐ 11-20..... ☐
21-50..... ☐ 50+..... ☐

20 / What percent of your employees live in:

The Immediate Area..... %
SF..... %
Bay Area..... %
Other..... %

21 / What is the average hourly wage of non-managerial staff?

\$6.75 or Less..... ☐ \$6.76-\$10..... ☐ \$11-\$15..... ☐
\$16 - \$20..... ☐ \$21 - \$25..... ☐ \$26 +..... ☐

22 / What is the average educational level attained by non-managerial staff?

High School..... ☐ Vocational Training..... ☐
2-Year Degree..... ☐ 4-Year Degree..... ☐
Beyond College..... ☐

23 / Additional Comments:

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Draft for Public Review

The Central Waterfront Neighborhood Plan



San Francisco Planning Department
As Part of the Better Neighborhoods Program
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BETTER NEIGHBORHOODS
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